## THE

# BRITISH ARMY



Victoria Queen of Great Britain and Ireland Empress of India,

REFERENCE BOOK

# 11

THE

# BRITISH ARMY

BY

A LIEUTENANT-COLONEL IN THE BRITISH ARMY

WITH AN INTRODUCTION BY

MAJOR-GENERAL F. MAURICE, C.B.

(Commanding the Woolwich Division).

"SI VIS PACEM, PARA BELLUM."

WITH TWENTY-SEVEN FULL-PAGE PLATES
(THIRTEEN BEING IN COLOURS)

AND THIRTY ILLUSTRATIONS AND DIAGRAMS IN THE TEXT.



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### INTRODUCTION.

THIS work is written by an exceedingly competent officer of the English Army, whose position has given him a large acquaintance with the views of foreign soldiers and the condition of foreign armies. It was originally written because he wished that the English Army should be better known abroad than it has hitherto been.

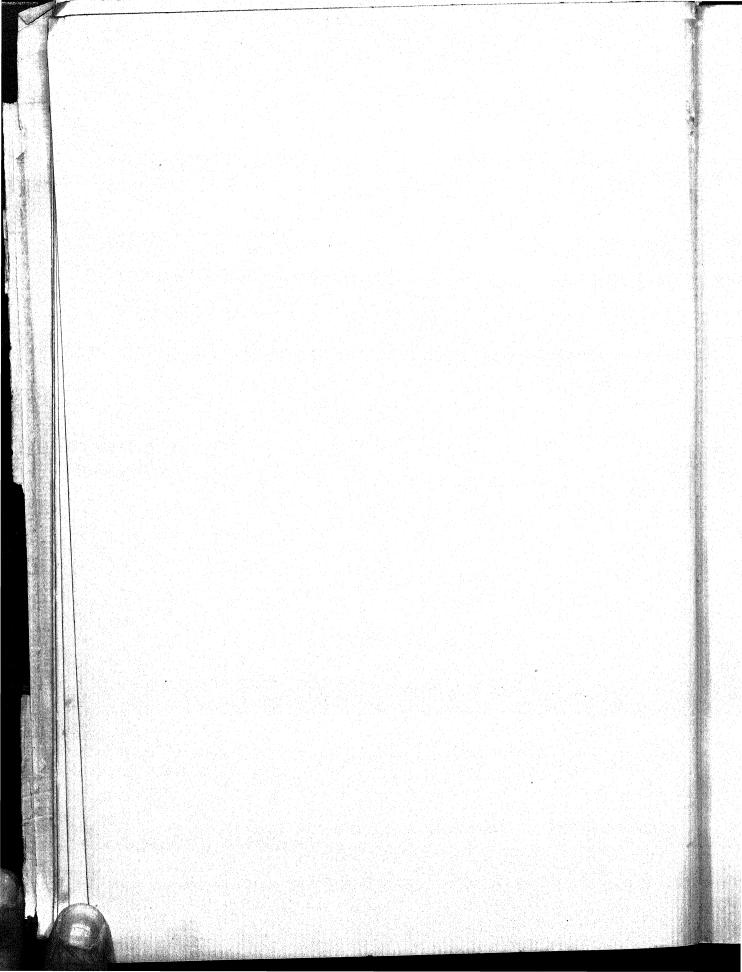
It appears that, despite the historic past of the British Army on the Continent, the general impression among foreign officers was that literally we had no army at all. The conditions of life in Germany are so absolutely determined by the necessity of maintaining an army large enough to defend the Fatherland against all comers, that those whose whole existence is almost daily affected by the effort to put the whole manhood of the nation into the field, whenever that may become the will of the Emperor, are scarcely able to imagine that a nation which does not resort to compulsory military service can have any serious armed power at all. Captain Mahan's volumes, the Jubilee Review at Spithead, the assembly of the navies of Europe at the opening of the Kiel Canal and round Cyprus, together with certain successive political incidents, to which it will be more courteous not to allude too pointedly, have made the most homestaying dweller in every Continental little Peddlington have at least some vague idea that Britain is at sea a war power that has to be taken into account. Phrases about the sick old woman are no longer to be conjured with. But of the British Army as it is, not only they, but the vast majority of German officers, absorbed as they are in the severe daily routine of barrack life, have little knowledge. They know that we have only an army recruited by voluntary enlistment, and they have hitherto assumed that practically it was an army of volunteers, pretty much in the sense in which the Americans who went to Cuba, or those who fought through the Civil War, were an army of volunteers. Of the the very difficult problem which we have had to face in meeting the necessities of a world-wide Empire, and of the success with which, on the whole, that problem has been dealt, thanks to our supreme navy and our incomparable mercantile marine, they were, with few exceptions, wholly unaware. That our system is not perfect, and that it has undergone of late years especially a progressive evolution which is not at an end, is a fact which no British officer and no foreign student of the British Army would be disposed to deny. The necessity, before improvement in any matter can be effected, of carrying with us the consensus of the nation in a degree wholly different from that which is required for a similar purpose in countries which have known the bitterness of passing under the heel of the invading army and of the conqueror, causes discussion among us to assume a critical form that in its echoes abroad produces an impression wholly unfavourable to all that has been done here. Foreign newspapers do not supply their readers with the long and full accounts of what takes place abroad to which we are accustomed. Very short summaries, at the best, reach the general reader of our most successful campaigns beyond sea, and the vaguest possible impression therefore prevails as to the means by which a British Army is placed in the field for a campaign in the Soudan or in Afghanistan. It is, therefore, a real service rendered to our influence in deplomacy abroad that an able and well-informed officer should write for all who are interested in such questions a fair and candid statement of the actual circumstances of our army of to-day. Changes have been taking place so rapidly of late years, that the difficulty is for any writer to keep up with them, so that his work may not be out of date almost before it is published. On that account, if for no other, it seems to me it was an excellent idea that English people should have the opportunity of reading what record can in 1899 be given of their army among the forces of the world, for presentation to the critical eyes of German soldiers and of the armed German nation. The "Army Book" was published several years ago, and many alterations have taken place since it was composed. Moreover, in many respects this

work deals with the subject in a manner more likely to supply what is wanted by a very large class of English readers. The illustrations very much assist the text. What has been written for a large popular and foreign *clientèle* is sure to have been adequately stripped of such mere professional technicalities as might make it difficult for many readers, who would like to understand something of the conditions of army life and yet would be frightened by any mere military text-book.

The original author has undertaken, as far as possible, to bring the work up to the date of publication, and though at the moment I write this has not been completely effected in regard to some very recent changes, I feel such absolute confidence in him that I have no doubt that by the time this comes under the eyes of English readers, the volume will be the most recent and accurate account of the army as it is which has yet been published.

F. MAURICE, MAJOR-GENERAL.

NOTE.—In one or two cases officers have been promoted or have resigned commands since the illustrations were printed.



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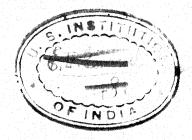
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THE BRITISH ARMY.



A. 11



# THE BRITISH ARMY.

#### FIRST SECTION.

### Historical Introduction.1

 $\mathbf{A}^{ ext{MONGST}}$  all the armies of Europe that of Great Britain alone has retained a system, which everywhere else is regarded as obsolete, viz: the system of Voluntary Enlistment. This circumstance causes the British Army to differ essentially from the armies of the other Great Powers in its organisation as well as in its recruitment. In forming an opinion about the British Army, and in making a comparison between it and that of any other nation, it must be borne in mind, that its purposes and duties are entirely different from those of the armies of the other Powers. Its primary duty is the Defence of the United Kingdom; next comes the work of placing garrisons in the various parts of the huge Transoceanic Empire, which the army jointly with the navy has conquered and built up for the benefit of the mother country; an empire on which the sun never sets, and which encircles the globe with a chain of fortified places. Over each of these floats the "Union Jack", and each is guarded by the Redcoats of Queen Victoria. Its third duty is to safe-guard British interests outside the Queen's dominions; which means the mobilisation of a military force, the strength of which is to be commensurate with the magnitude of the interests to be defended, and which, thanks to our dominance of the sea, can always be brought to bear on points of greatest mischief to the enemy, and of utmost advantage to Great Britain.

<sup>&</sup>lt;sup>1</sup> The statistics of this introduction are mostly derived from the excellent official publication, the "Army Book of the British Empire" and from Clode's "Military Forces of the Crown."

It is the second of these three duties which precludes the possibility of filling the ranks of the regular British army by means of Universal Military Obligation, because it would be impossible to train the men, to send them to India or the colonies, to acclimatise them there, and bring them home again and discharge them within the short time that they are kept with the colours in other armies. This consideration is decisive for the question of long voluntary service for the regular army, and as the troops abroad and the regiments that are kept at home are to be constituent parts of the same armywhich is indispensably necessary for the mere relief of the former by the latter, even if there were no other valid reasons for it—it follows that Voluntary Military Service had to be retained even for those troops who have to discharge the primary duty of defending the United Kingdom. The regular troops at home must act as feeders for those portions of the army that serve abroad, and must also be in a fit state to be mobilised in case of war for the defence of the country. In this latter duty they are aided by various auxiliary forces appointed for the discharge of certain distinct duties. These forces also serve voluntarily, although the militia is subject to compulsory service and their enlistment is decreed yearly by Parliament. The military spirit of the British nation is evinced very clearly by the fact, that of the defensive forces of the country, a quarter of a Million men, the VOLUNTEERS, serve without drawing any pay what-

For the discharge of the third duty of the British army Universal Military Service would in case of war outside the Queen's dominion certainly place a larger number of well-trained men at the disposal of the government; but hitherto the different governments, one after another, have always assumed that the forces they were able to send into the field were fully adequate for the purpose in hand. And besides, it is very questionable, if even Great Britain with all her enormous mercantile navy, would be able to maintain beyond the seas and supply with all necessaries a larger force than can be mobilised under present circumstances.

Accordingly Great Britain has adhered to the system of Voluntary Enlistment as being best suited for her requirements, and it seems that no alteration will in the near future be made in that respect. It is not to be denied that Great Britain is far behind the other Great Powers of Europe in the number of trained soldiers at her disposal; but, on the other hand, it must be kept in view, that like

that of all other armies the peace footing of the British army has been increased from time to time, and that it now stands in nearly the same proportion to the armies of the other Powers, as it did at the commencement of the Napoleonic wars, in which Great Britain from beginning to end consistently took the leading part in the struggle against French love of conquest.

History shews that the British army has suffered no great national reverse, and that its present organisation is the outcome of its gradual development. We observe little of that symmetry, which is so common in the other European armies; nay, we find even some anomalies. In many cases it was impossible to remove these anomalies, without injuring the esprit de corps and doing violence to the national sentiment in which the existence of the whole army is rooted; nor without breaking with the most sacred and cherished traditions of the several bodies of troops, which ever, since the end of the 17th century, have had to record an all but unbroken career of victory. Of late much has been done to bring the organisation of the army more in harmony with the conditions of modern warfare, and it is our object to give in the following pages an account of the gradual development of our army from the Restoration down to the present day.

When in 1660 Charles II. again ascended the throne of his ancestors, the old Parliamentary army, with the exception of two regiments, was disbanded. The two exceptions were: The cavalry regiment "Earl of Oxford", now the ROYAL HORSE GUARDS, and the regiment of infantry "Colonel Monck", now the COLDSTREAM GUARDS, both of whom were received into the service of the King with seniority dating from 1660. The King also brought over with him from France two English regiments: "Life Guards", now the first and second regiments of LIFE GUARDS and the "Foot Guards", now the GRENADIER GUARDS. The Scotch regiment of the Guards was raised in Scotland in 1660, so that in the year following the total force of the standing army amounted to about 5000 men, divided into two regiments of cavalry, and six of foot. This small army drew payment from the crown, in other words it was supported from the Civil List. The freedom-loving Britons regarded it, however, with distrust, it having been the custom of the country from of old to raise troops only for a war and to disband them again after the war was over. It took a long time ere modern ideas found acceptance in the views of the most conservative nation in the world.

Troubles in Ireland and elsewhere soon led to an increase of our military forces, and in 1684 they already amounted to 15,000 men, stationed in England and in Ireland. The revolution of 1688 led to a reorganisation of the regular army, which was legalised by the BILL OF RIGHTS soon after the accession of William III., and the army has held ever since the legal status it then acquired. Even now the Annual Act, which gives legal force to the Army Act for the current year begins with the preamble: "Whereas the raising or keeping a standing army within the United Kingdom of Great



Duke of Marlborough.

Britain and Ireland in time of peace, unless it be with the consent of Parliament, is against law", &c.; and this is followed by the decree fixing the strength of the army for the ensuing year.

In addition to the standing army a MILITIA has been in existence in England from the earliest days. During the reign of Edward I. it was even decreed by law that all free men were bound to do military service from their 15th to their 6oth year; in times of peace within their respective counties and in the case of a hostile

invasion anywhere within the country. Subsequently the organisation of the Militia was rendered more or less efficient by additional legislation; but the principle of Universal Military Obligation was always admitted, and after the Restoration one of the first acts of Parliament in 1662 was the rigid and legal organisation of the Militia. The owners of the soil were bound to raise and maintain foot and horse soldiers, horses, and arms in proportion to the value of their possessions. An officer, appointed by the King to command the Militia of the whole country, elected all the officers under him. The Militia was called out in 1690, when a French invasion of the country was anticipated, and again in 1715 and in 1745 during the insurrections

in Scotland. In 1757 the Militia was re-organised, and the above named obligation was transferred from the owners of the soil to the counties and parishes. For every county there was fixed the number of men to be raised, the so-called QUOTUM, as well as the amount of material of every kind to be supplied, and Universal Military Service with the practice of the ballot was introduced. The men were kept three years with the colours, but the obligation to serve was in force from the 18th to the 50th year. Substitution and exemption from military service was exceptionally conceded in individual cases.



Life Guards. Heavy cavalry. Grenadier, Infantry-of-the-line. Inf. Officer. Highland Infantry.

The British army at the time of the battle of Dettingen.

During the 18th century the organisation of the regular army was subjected to but few changes; only its numbers varied according to the necessities of the day. Under Marlborough it formed the kernel of the army, which won some of the most important battles of those days, and the names of Blenheim, Ramillies, Oudenarde, and Malplaquet emblazoned on the standards of the regiments that took part in those contests, keep alive even now the memory of those proud days. Dettingen and Minden, Louisburg and Quebec characterize other glorious campaigns, and although the British army failed to

retain the United States under the crown of their King, yet at least it succumbed to an opponent of its own kindred. In 1747 the strength of the army amounted to 61,000 men, and after the conclusion of peace in 1748 it was reduced to 18,000 men only. During the Seven Years' War it rose in Great Britain and on the continent of Europe to 67,000 men, with 37,000 men in other foreign garrisons. In 1763 the numbers dropped down again to 17,000 men in England and 28,000 men in garrisons abroad, and similarly the American War caused a large increase of the army, which was again after the conclusion of peace in 1783 reduced to 17,000 men stationed in England. These numbers comprise only the real British troops, but do not include the foreign contingents, which were paid and in many cases even raised by the British government.

As was the custom in those days each regiment was paid and maintained on the basis of a kind of contract made between its colonels and the Crown. The former received the wages and the allowances for clothing, &c. of the men in proportion to the number of his men, and he, with his captains acting as intermediaries, made his own terms with his men with respect to length of service, &c. The allowance which covered clothing went to the "stock purse" of the regiment, and after settlement of the year's accounts the balance was divided amongst the captains. At the enlistment the men as a rule engaged for life, but when there was a lack of recruits the time of service was frequently reduced. In the times of Queen Anne for example a three years' period of service was common; in the special circumstances of 1745 even this was reduced to two years, and in 1759 to 1775 the engagement was mostly made for three years, or till the end of the war. Such were the systems of enlistment and organisation, till in 1783 a law was enacted, which placed the management of the infantry and the cavalry in the hands of the Secretary of State for War, who was a member of Parliament. The management of the artillery however remained under the control of the Board of Ordnance, whose chief was the Master General of Ordnance. The regiments were no longer called upon to provide for their own recruitment, clothing, &c., and the supreme command of the whole army was entrusted to the Commander-in-Chief, who was appointed by the King.

This new organisation was given to the army on the eve of the Great War against France, and in the year 1792 its numbers, inclusive of the troops in foreign garrisons, amounted to only 57,000

men. Inclusive of certain periods of peace Great Britain, alone or with allies on land and at sea, waged war with France in Europe, Asia, Africa, and America for 22 years, and cast not only her military forces but all her wealth and resources into the balance. From 1807 onwards Spain and Portugal were the chief seats of the warlike operations of the land army. Some of the campaigns failed strategically, but wherever the British troops appeared on the battlefield, they always retained the victory, till at last Wellington jointly with his Spanish and Portuguese allies freed the peninsula from the enemy, carried the war into France, and brought it to a victorious conclusion under the walls of Toulouse. Once more in 1815 the British troops formed the nucleus round which the armies of Holland and of some of the smaller North-German states collected in Belgium. Upon this force and upon the Prussian army fell the weight of the French attack, and jointly they sealed for ever the fate of the First Napoleon on the field of Waterloo.

During this period the resources of Great Britain had been severely taxed. At the outbreak of the war the Militia was raised by ballot and by substitution; during its continuation militia men were trained and enlisted as volunteers in the regular army, engaging to serve for five years, or till the end of the war. Between 1803 and 1805 an invasion of England seemed highly probable rendering necessary an uninterrupted increase of the army. In 1805 the regular army numbered 61,000 men abroad and 93,000 men at home; the Militia consisted of 76,700 men, and for local defence there were raised volunteer-corps amounting to 460,000 men. In 1808 a law was passed enforcing Universal Military Obligation without substitutes for all men between 17 and 30 years of age, capable of bearing arms for the purpose of erecting a "Local Militia" in addition to the "regular" or "general" Militia. These were to serve for a period of four years, but had to be under training for the first year only; those men who were already serving in a Volunteer-corps, and accordingly found their own uniform and arms, were exempt from serving in the Local Militia. The said Militia numbered 200,000 men in 1809, and it is to be remarked that the law enacting the formation of the local militia has never been abrogated, has still legal validity within the United Kingdom, and can be enforced any day with consent of Parliament. The drill-ground was to be no more than five English miles distant from the man's home. In case of a hostile invasion the sovereign had the right to call in the trained men, to add them

either to the regular army, or to the general militia, or to form them into separate corps. They were not bound to serve outside the limits of Great Britain.

During the great war, the British government disposed: in the first line, of the regular army; in the second line, of the regular or general Militia; in the third line, of the local Militia and the corps of volunteers, which were kept up even after the fear of invasion had



The British army at the time of the battle of Waterloo.

passed away. In the year 1809, the armed forces of Britain numbered, of British born troops 821,650 men, viz:

Infantry and Cavalry: Regulars and Militia	. 285,398 men
" " " Local Militia	. 198,534 "
Artillery and Engineers	. 14,261 "
H. E. I. Co.'s European troops	. 4,051 "
Volunteers: Great Britain	. 114,066 · "
" İreland	. 75,340 "

At that time, the population of the United Kingdom consisted of 14,942,646 persons, and, deducting the local militia and the volunteers as not being permanently engaged, the above numbers show a permanent armed force of  $2.9\,^{0}/_{0}$  of the population, assuredly no small effort. In the course of the war the tendency made itself felt more and more, to employ the general militia in offensive operations outside Great Britain; indeed, in 1813, battalions of militia were sent, under their own officers, to join the army of the Duke of Wellington

in France. Of the 250,000 recruits enlisted in the regular army in the eight years from 1805 to 1812, 100,000 men were supplied by the militia. These numbers show what huge forces of reserve can be raised by the British military system, and what great armies the United Kingdom (not to mention the colonies and India) would be able in these our days, to send into the field in a great crisis, seeing that the population is three times as numerous, and the wealth beyond all computation greater.



Arthur Wellesley, Duke of Wellington.

After the peace of 1816 the army was greatly neglected. The

militia and volunteers ceased to exist and the estimates of the regular army were reduced to a minimum, till in 1821 there were only 101,031 men under arms, of whom 31,572 were stationed in the colonies, 19,267 in India, and 50,192 at home. In the year 1829, the short service enlistments introduced during the great war (viz: for seven years with the infantry, ten years with the cavalry, and twelve with the artillery) was abolished, and service for life once more became the rule. The artillery was reduced to the lowest possible minimum of horses and guns, and those sections of the army that were retained at home were mere parade troops, who gradually had forgotten all the lessons taught by the great war. During this same period the Royal troops in India, jointly with their faithful comrades,

the troops of the East India Company, gained numerous victories, which led to the destruction of the Sikh monarchy and the incorporation of the whole of the Punjaub with the Indian Empire.

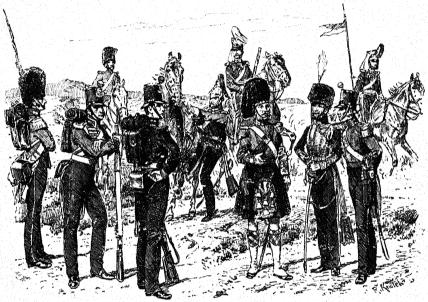
Happily a reform period again set in, ere the British army was called upon once more to take the field against a European enemy. During the Sikh war the army had to be re-inforced, and as usual, when men are scarce, the time of service was reduced. In 1847 Parliament passed a law according to which recruits were enlisted for 10 years, with subsequent option to re-engage and to continue to serve long enough to earn a pension. In 1852 the strength of the field artillery was raised considerably, and the militia, which had been neglected since 1816 was again enrolled, but on the basis of VOLUN-TARY ENLISTMENT. Universal Military Obligation was to be enforced only, if a county was unable to furnish its quota of volunteers; not, however, without previously obtaining the consent of Parliament. This system is still in force in the recruiting of the militia. At the beginning of 1854 the strength of the army consisted of 71,081 men at home, 39,754 in the colonies, and 29,208 in India, making a total of 140,043 men.

The history of the Crimean War is known all over the world. In it the British soldier reaped abundant glory, and the names of "Alma", "Balaclava", "Inkerman", and "Sebastopol" will always be numbered amongst the proudest names inscribed on the standards, but the administration of the army broke down in a most wretched manner. The long years of peace led to a total neglect of the military administrative services; the army was administered by three or four different ministries, instead of by a single War Office, and confusion and uncertainty universally prevailed. When, in the winter of 1854/55, the dreadful sufferings of the heroic soldiers on the bleak plateau of Sebastopol were made known in Great Britain, a storm of universal indignation broke out, and a complete reorganisation of the military administration was immediately taken in hand and partially carried through.

After the conclusion of peace, when the troops had scarcely returned to their garrisons, the news of the Indian Mutiny startled the nation like a bolt out of the blue. Heavy re-inforcements were despatched to India, and by their help the mutiny was suppressed, but not without enormous losses. The insurrection proved that the number of British troops kept in India was too small. The East India Company had in its pay 9 battalions of European infantry and about

6000 European artillerymen, and in addition to these there were stationed in India 4 British regiments of cavalry and 22 battalions of infantry. The total force of European troops amounted to about 40,000 men, whilst the native Indian troops numbered 240,000 men.

When on the 1st of January 1859 the East India Company was dissolved, and the government of India was assumed by Her Majesty, the former troops of the Company were incorporated with the British



uards, Dragoon D of the "Scots Greys", Infantry-of-the-line, Rifleman, Grenadier Guards. Dragoon.

Light Dragoon. Highland-Officer. Officer Lancer. of the horse-artillery. Infantry-Officer.

The British army at the time of the Crimean war.

army, which was now raised to 65,000 men and afterwards, in 1886 and 1887, it reached its present strength of 73,000 men.

Hand in hand with this new arrangement naturally went an increase of the army-units. In addition to the troops taken over from the East India Company, 28 new battalions of infantry and 2 regiments of cavalry were formed in the years 1858 to 1860. By this means the infantry and cavalry rose to their present number of battalions and regiments, although their strength has since then fluctuated very considerably. The artillery and engineers have also since 1858 been subjected to many transformations, but it would lead us too far to describe these in detail.

The wars in China and Abyssinia in 1860 and in 1868 were waged with British and native troops from India. During the period between 1859—71 the principal change in the organisation of the regular army was effected by the introduction of the law of 1867, which created a reserve of men, who had already served in the regular army, and a second reserve of men, who were still serving in the militia, but who, in return for a bounty, engaged to join the regular army in case of mobilisation. This militia reserve is still in existence, but the other reserve has been subjected to many important changes, with which we forbear to trouble the reader. This law bears the stamp of the influence exercised on the military organisation of Great Britain by the events of 1864 and 1866, and deserves to be noticed on that account.

But the characteristic event of this period is the creation of the "Volunteer" army in 1859, when the fear was entertained that Napoleon III. intended an Invasion of England. In consequence of a groundless anxiety resembling a panic, it was at first believed that, with the disappearance of the danger, the Volunteers would disband, but this was not the case. Ever since 1859 and 1860 this force has made steady progress both in numbers and in efficiency. Being at first treated somewhat stepmotherly by the War-Office, they had to rely on themselves; when however, the intrinsic value of this popular defence was recognized, the Volunteers were regarded by government as an integral part of the army, and at present the Volunteer-army numbers a quarter of a million men, who have attained a degree of military efficiency, which is characteristic of their enthusiasm and love of country.

Among the other reforms carried through in this period may be mentioned the abolition of purchase. Up to 1871 ensigns' commissions were purchased by gentlemen who had passed a certain examination. A commission in the infantry for example cost £450. Every commission had its recognized money value, and if a promotion was to be secured (of course in due order of seniority) only the difference had to be paid between the amount already paid in, and the sum now due. Only vacancies caused by death were filled without charge by the promotion of the senior officers. But purchase

<sup>&</sup>lt;sup>1</sup> The Danish War. The translator.

<sup>&</sup>lt;sup>2</sup> The Austro-Prussian War. The translator.

was abolished, and ever since, officers of infantry and of cavalry have been appointed from the corps of cadets, as had been the case all along with the corps of artillery and engineers, and subalterns from the militia also receive commissions in the regular army.

Finally, in the latter years of this period, steps were taken to concentrate as far as possible the main forces of the army at home by abolishing the colonial garrisons. In the years between 1868 and 1871 the number of cavalry regiments within the United Kingdom was raised from 16 to 19, and that of the battalions of infantry-ofthe-line from 46 to 68, without the necessity of raising new forces. The principle which was then established and still is acted upon, is, that in those colonies which are self-governing, the British troops should occupy only the important strategic points such as, for example, the fortified coaling-stations of the navy, but that the colonies must themselves raise and maintain the troops required for their own safety. This principle has been applied and carried through in the five Australian colonies, in Canada (excepting Halifax), in Newfoundland, Tasmania, New Zealand and the Cape colonics (excepting Cape Coast Castle), whilst, of the other colonies, Gibraltar, Malta, Bermuda, Cyprus, Mauritius, Natal, Sierra Leone, St. Helena, Ceylon, Singapore, Hong-Kong, Jamaica and St. Lucia still are garrisoned by Imperial troops. In a few cases they are joined by local forces.

In 1871 a new system was introduced in British military affairs, a system which was created by Mr. Cardwell, the Secretary of State for War, and was due to the above mentioned reforms that were effected between 1867 and 1871. The victories of the Prussiansubsequently German—soldiers in 1866 and 1870 had deeply affected the public opinion of both military men and civilians in Great Britain; the necessity was admitted, that, in case of war, the army on a peace footing must be quickly increased, and that for this purpose a large reserve force of trained soldiers is a primary condition. The creation of this reserve and the ever increasing difficulty of attracting recruits for a long term of service, led in 1871 to the introduction of short service on active duty to be followed by service in the reserve, as is prescribed by the "ENLISTMENT ACT" of 1870. In accordance with this law no recruit can enlist for more than 12 years, but he can engage either to serve the whole time with the colours, or partially with the colours and partially in the reserve. The length of these latter periods is determined from time to time by the War minister, and in the beginning it was arranged that in the infantry

6 years should be spent with the colours, and 6 in the reserve; afterwards the active service was increased to 7 years, and service in the reserve was reduced to 5 years. In the other arms frequent changes were introduced according to the experience gradually made in carrying out this new system.

At the same time measures were taken to regulate the recruiting, and for that purpose each body of troops had a certain territorial recruiting district with a permanent depôt allotted to it. In 1872 a beginning was made with the infantry-of-the-line. Previously it had consisted of 25 regiments (Nos. 1 to 25) of 2 battalions each, 83 regiments (26 to 59 and 61 to 109) of 1 battalion each, and 2 regiments of rifles (No. 60 and the rifle-brigade) of 4 battalions each. The 83 single battalions were linked in brigades of 2 battalions each, and these formed with the old regiments of like strength 66 "BRIGADE SUB-DISTRICTS", to each of which there were yet to be added as a rule 2 battalions of militia, as well as the volunteers already formed in the district. The rifles were still recruited from the whole Kingdom, and had their common depôt in Winchester. Of the two regular battalions of a subdistrict, one should always be stationed at home, and the other in the colonies or in India. The former was to train recruits for the latter, relieve it after a certain number of years, and afterwards on its return receive recruits from it. If perchance both the battalions of regulars are in garrisons abroad, a battalion of the militia is to be called in to serve as feeder to them. On this system they succeeded, within a short time, in raising a sufficient number of recruits in the home-districts, but in many cases the so-called brigades were not sufficiently uniform. It was therefore determined to combine the two battalions of regulars and the two battalions of militia in each brigade into a "regiment", with one body of officers for the two regular battalions, and another for the two battalions of militia. This arrangement has been in existence now ever since 1881, since when no essential alteration has been effected in the organisation of the infantry. A similar territorial system has been introduced in the garrison artillery, whilst the other arms are still recruited from the whole of the United Kingdom: But although the British infantry and garrison artillery are recruited from certain districts, yet it rarely happens that a body of troops is in garrison in its own recruiting districts. The greater part of the army is quartered in the south of England and in Ireland, and there can therefore be no talk of a territorial system in the continental sense of the term.

In the years 1886—87 the number of units of infantry and artillery in India was increased, and to every regiment of cavalry in an Indian garrison, a fourth squadron was added to the three of which it had consisted hitherto. New units of artillery were also created, but the infantry was transferred to India from the colonies. At the same time the strength of the battalions that remained in the colonies was largely augmented. Since 1882, that is since the time that Egypt absorbs a British force, it has proved difficult to keep from the several regiments of infantry one battalion stationed at home and one abroad. This trouble was removed to some extent by employing in larger expeditions troops of the guards, and also by increasing the depôts of those regiments both of whose battalions were stationed abroad. None of those measures, however, was sufficient to establish the equilibrium between the number of battalions at home and abroad, and accordingly in the years 1897 and 1898 seven new battalions of the line were ordered to be raised, while to the two regiments of Foot Guards, which hitherto had had only two battalions, a third battalion was added, and it was decided that a battalion of each of the three regiments should always be stationed in the Mediterranean. At the same time the establishment of all battalions at home was raised by 80 men each, numerous new units of field and garrison artillery were formed, and a thorough reorganization of the cavalry was carried out.

Before concluding this historic retrospect it may be advisable to add a few words about the organisation of the War Office, an administrative system about which more printer's ink has been wasted than about almost any other similar authority in all Europe. The chaos there prevailing in 1854, and the re-organisation then carried through has already been dwelt upon. In 1855 the BOARD OF ORDNANCE was abolished. Its military duties for the government and discipline of the artillery and of the engineers were entrusted to the Commander-in-Chief, and the supply of the army with munitions of war was undertaken by the War Office. The same office was also charged by the Chancellor of the Exchequer with the duty of victualling the army, and of victualling the militia by the Home-Secretary. Before the termination of the war the whole administration of the army was in the hands of the War Office, and the whole executive command lay with the Commander-in-Chief. Naturally it took some time before this new organisation was worked out in every detail. In 1870 at last the War Office was, in accordance with the newly enacted law the "WAR OFFICE ACT", divided into three great departments: 1. The Department of the Commander-in-Chief (discipline, training, personnel, and recruitment); 2. The Department of the Inspector General of Ordnance (purchase and supply of arms, munitions of war, clothing and equipment, building and maintaining fortifications, barracks, and other structures); 3. The Department of the Financial Secretary (control of all the moneys voted by Parliament). All these three departments were directly responsible to the Secretary of State for War, a Member of Parliament and of the Cabinet. This organisation was in force till 1888, when after numerous investigations, debates, and experiments, a new system was introduced, which rendered the Commander-in-Chief responsible for all that concerns the soldier directly, viz: discipline, training, barracks, provisions, clothes, equipment and arms, whilst the Financial Secretary who had charge of all the money-matters was to purchase all the necessaries, and to deliver them to the military authorities for distribution among the troops. Thus the number of the large departments was reduced to two; one military, and the other civilian. But this system led to numerous complaints, and when in 1895 H. R. H. the Duke of Cambridge retired, his successor Field Marshal Viscount Wolseley was commissioned by government to carry through the new organisation of the War Office, which we now proceed to describe.

### I. Recruitment of the Army.

The regular army is recruited according to the orders and under the superintendence of the Inspector General of Recruiting and of the Generals commanding the military districts at home. The chief recruiting authorities are, the commanding officers of the regimental districts of the infantry (see Section VI). In that important service they are assisted by the *personnel* of the regimental depôt, the cadres of the battalions of militia and volunteers of the regiment, and by a few pensioned non-commissioned officers, who receive special pay as recruiting sergeants. In a similar manner, recruiting is carried on also by the commanders of the districts for militia and volunteer artillery. Finally, in the larger cities—London, Leeds, Sheffield, Man-

chester, Birmingham, Liverpool, Woolwich, Glasgow, Edinburgh, and Dublin, special staff officers are appointed to carry on the business of recruiting. These officers are charged with the duty of making known as widely as possible, in their respective recruiting districts, the advantages of service in the army, by sending subordinates from place to place, by posting up enlistment placards, by lectures, &c. In prosecuting their efforts they are not to ignore any stratum of the population, or any locality of the country. In connection with this, placards are put up at all the Post Offices, and any one who is inclined to join the army receives a form, which furnishes all necessary information. When a man who is physically fit, applies, he is asked if he wishes to serve in the artillery, with the engineers, or with the foot guards. If he has no special predilection he is, if possible, to be enlisted for one of the units recruited from the local district. Any unit whose numbers are incomplete, may carry on recruiting in its garrison. Lately many men have been enlisted by adding recruiting sergeants to such units as were making a change of garrison on foot, or were on the march to manœuvres.

As in war time, so also in time of peace, the Militia is an abundant feeder to the regular army; in the year 1897 no fewer than 14,052 recruits passed over to the regular army.

The process of enlisting is as follows: The enlisting sergeant hands to the intending recruit a form stating when and where he is to report himself, and supplies him at the same time with all needful instructions. On presenting himself the young man is inspected by the recruiting officer, and if passed he is immediately examined by the military surgeon. In case no surgeon is at hand, the recruit, if he is apparently healthy and strong, may be admitted into the Royal service at once. If, however, he subsequently appears unfit, he may still be rejected. The fitness of every recruit must be attested by a specially authorised officer. Next, the recruit takes the military oath, and when that is done, he is a soldier and is entitled to receive pay. But before the recruit is finally accepted, he must present himself before a superior officer, usually the commander of the battalion or of the regiment, and, when the latter has satisfied himself that all papers, surgeon's certificates, &c., are in order, he approves the enlistment. Of boys 14 to 16 years of age, a limited number is admitted (5 for every regiment of cavalry, 12 for every battalion, &c.) to be trained as buglers, drummer-boys, artisans, and artificers. But they must produce the written consent of their parents; and, as the number of such applicants is usually very large, the sons of non-commissioned officers are generally preferred.

Before we enter on the details of the terms of enlistment, it might not be out of place to quote some statistics about the recruiting of the regular army in the year 1897.

In that year 77,648 men received their first "form". Of these there were:

Rejected before attestation	. 25,892
Failed to present themselves before the recruiting	3
officers	. 13,185
Rejected for other reasons	. 22
Attested	. 38,549
After attestation:	
Rejected by various authorities	. 4,212
Deserters	. 507
Non-effective for other reasons	. 59
Finally found fit and enlisted	. 33,771

#### a. Periods of enlistment for the regular army.

The recruit can be enlisted either for "long", or "short" service. The former consists of twelve years with the colours without obligation to join the Reserve, and is admissible only for:

- 1. The Horse-Guards,
- 2. The Corps of Army School-Masters,
- 3. Armourers,
- 4. The West Indian Regiment,
- 5. Bandsmen of the Foot-Guards,
- 6. Special artificers of Garrison Artillery Ordnance,
- 7. Engineers,
- 8. Boys of all arms.

"Short Service" is spent with the colours and in the reserve in periods which vary according to the different arms, viz:

 CavaIry-of-the-line, Field and Garrison Artillery, Army Ordnance Corps, Malta Artillery . . . . . Seven years active and five years reserve. But, if the soldier has been in garrison abroad, at the termination of his active service time, he is bound to serve one more year with the colours but remains only four years with the reserve.

2. Army Service-Corps.

Three years active and nine years reserve, with the same obligation to serve an additional year with the colours (and eight years in the reserve) as above.

3. Foot Guards, Infantryof-the-line and medical service.... Seven years active and five years reserve, or three years active and nine years reserve at the option of the recruit, with the same obligation of an additional year in active service (and four or resp. eight years in the reserve) as above.

4. Engineers (excepting those mentioned under 5 and 6) . . . . .

Seven years active and five years reserve, or three years active and nine years reserve at the option of the recruit, but in proportions settled by the War Office, with the same obligation of an additional year as under head 3. Drivers of the Engineers are enlisted for only three years active and nine years reserve.

 Army postal service, telegraph and railway reserve of the engineers Three years active and three years reserve. These recruits may be transferred to the reserve immediately after enlistment, or may be discharged, if there is no employment for them in the postal service, or with any railway company.

6. Submarine Miners-reserve of the engineers

Three years active and three years reserve. These recruits are transferred to the reserve immediately after enlistment.

The last two categories of recruits have to serve with the volunteers and are trained by them.

# b. Size and Age of the Recruits for the Regular Army. The physical conditions that recruits have to fulfil are as follows:

Arms		ght minimum	Chest Measurement	Age
Household Cavalry	6 ft tin	5 ft. 11 in.	36 in.	
Household Cavally		5ft. 7 in.	34 in.	
Dragoons and		ears of age	37	
Lancers		5 ft. 6 in.	34 in.	
		years of age		
하라면 된 그렇게 되었다. 그렇		5 ft. 6 in.		
		rears of age		
Hussars {	11	5 ft, 5 in.	34 in.	
		years of age		
≕ (Gunners	25	5 ft. 6 in.	34 in.	
THE Cunners	5 ft. 6 in.	5 ft. 4 in.	34 in.	18 to 25
₹ Artisans	,,	5 ft. 4 in.	33 in.	years.
	27	5 ft, 6 in.	34 in. if under 5 ft. 10 in.	7 111
Sappers Pontoon-men	,,	5 ft. 7 in.	35 in. if over 5 ft. 10 in.	
.∄{Boatmen	,,	5 ft. 4 in.	34 in.	
음 Artisans	23	5 ft. 5 in.	33 in.	
田 Urivers	5 ft. 6 in.	5 ft. 4 in.	34 in.	
		5 ft. 7 in.		
Footguards {	27	under 20 yrs.	as for Sappers	
		5 ft. 8 in.		
Infantry-of-the-line	1	over 20 years 5 ft. 3½ in.		
Army Service-Corps	Eft. Ein		If over 5 ft. 10 in. 35 in.	
Medical Service	J J 111.		If over 5 ft. 7 in. 34 in.	18 to 2
Artillery men	<b> </b>	"	If under 5 ft. 7 in. 33 in.	years.
	1 77	, n	바람들 회사 생생님 사이는 사람이 되는 그림 바	, , , , , , , , , , , , , , , , , , , ,

The Minimum weight for all arms is 115 lbs. Recruits wishing to join the engineers, the artillery or medical service, must be able to read and write, and for the corps of engineers they must have learnt some trade useful in that service. Under no circumstances are to be enlisted:

- 1. Men, who have been discharged from the army, army reserve, militia, marines, navy, naval reserve, or Irish constabulary on account of bad conduct.
  - 2. Deserters from any of the above services.
- 3. Militiamen, who have been called out to drill, unless they have received the consent of their commanding officers.
  - 4. Apprentices.
  - 5. Discharged convicts.

Into the British army none but British born subjects or British colonists are admitted, and the colonial armies admit only other subjects of the British empire.

In some cases it is permitted to admit men, who do not satisfy all the conditions with respect to height, chest-measurement, age, or weight; but in all such cases leave from superior authorities must be obtained.

With respect to the above dimensions and age the following statistics may be found interesting.

Of the 35,034 recruits, accepted in 1897 (inclusive of the colonial troops) there were:

```
1 556 under 18 years of age
16,083 between 18 and 19 years of age
                      20
7 405
               19
3 544
               20
               2 I
2 514
               22
I 733
I 054
               23
  765
               24 "
                      25
  380 25 years and upwards
35,034
4 627 under 5 ft. 4 in.
6 563 5 ft. 4 in. to 5 ft. 5 in.
6689 5 ft. 5 in. to 5 ft. 6 in.
5 461 5 ft. 6 in. to 5 ft. 7 in.
11,520 5 ft. 7 in. and upwards
  174 height is not recorded
```

<sup>35,034</sup> 

5 940 under 33 in. chest measurement 11,320 33 in. to 34 in. " "
10,225 34 in. to 35 in. " "
7 375 35 in. and upwards " "
chest measurement is not recorded.

35,934.

From these tables it appears that the British recruits, although on an average younger than those of other nations, are, as a rule, bigger and stronger. This is probably due to the widely prevalent physical exercises and games of the people.

## c. Extension of service of the Regular Army.

To secure efficient and experienced cadres for the army, permission is granted in many cases to extend the time of service beyond the period originally stipulated for, and also to remain the whole twelve years in active service. But this so-called extension confers no claim to Pension. After the expiration of twelve years those who do not wish to re-engage themselves, or are not allowed to do so, are simply discharged. Extension of the time of service does not even confer claim to higher pay.

The terms for extension of the time of service are as follows:

- a. Warrant Officers are entitled at any time to extend their time of service to twelve years.
- b. Non-commissioned officers, who have served successfully for one year as corporal, bombardier or second corporal (with the engineers) have the same right. If at the expiration of this year they do not make use of this right, it is open to the commander of the battalion, &c., to grant them leave after three years of service to extend their time.
- c. Other soldiers, who have enlisted for seven years active service, may have leave given them after three years by the commander of the battalion, &c., to extend their time of service to twelve years, especially if they have proved themselves useful, and have earned a "good conduct badge" (see Section III, Ch. V). Those who have enlisted for three years' active service and nine years in the reserve may be allowed at any time by the same officer to extend their time of active service to seven years, and then to twelve years as has been said above. Men engaged as trumpeters, drummers, buglers, pipers, or farriers are compelled to extend their time of service to twelve years; but, if they have forfeited their posts, they may be

placed in the reserve after the expiration of their stipulated time of service.

In the year 1897 the time of service of 3064 men has in such manner been extended to twelve years.

## d. Re-engagement in the Regular Army.

To strengthen the cadres still more and to make provision for such men as desire to earn their living in the army, certain classes of soldiers are allowed to engage for 21 years, and by this means earn a pension. The terms are as follows:—

- a. Warrant Officers, Staff Sergeants, and Sergeants of the corps of Army Schoolmasters have the right after 11 years' service, and those of other arms after 9 years' service to engage for 21 years.
- b. Corporals, bombardiers, second corporals, bandsmen, pipers and artificers may be allowed with the consent of the commander of the battalions, &c., to engage for 21 years after 9 years' service; trumpeters, drummers, and buglers after 11 years' service.
- c. Other soldiers may have leave given them by the commander of the battalion, &c., to engage for 21 years, if they have earned two "good conduct" badges. (But as a rule this leave is granted only to men in special posts such as officers' servants, mess waiters, &c.).

The service pensions to be earned in this manner are treated of in Section III, Ch. V.

In the year 1897, 2745 soldiers of all ranks have thus re-engaged.

# e. Continuance with the Regular Army after 21 years' service.

In many cases Warrant Officers and Non-commissioned Officers, and in rare cases even Privates, are allowed to continue in the service after 21 years, and thus earn a higher pension. It would lead us too far to enter into the details of the terms of such engagements. Suffice it to say that leave for such continuance of service must be obtained from higher authorities, without which nobody has a right to it. The only exceptions are those cases, where non-commissioned officers and men on duty at the depôts or in the cadres of the militia, yeomanry, or volunteers are authorized by the commanders of their regimental district. Men on such prolongued service may claim their discharge at any time upon three months' notice.

# f. Discharge from the Regular Army and Transfer to the Reserve.

The majority of the men are transferred to the Reserve after they have spent in active service the time for which they have engaged. The man must be sent to the place of his original enlistment, or to any other locality, where he wishes to reside, provided the travelling expenses to that latter place do not exceed those to the place of He must then immediately report himself to the officer, whose duty it is to pay off the army-reserve men. The officer then sends the papers to the depôt of the regiment for the purpose of keeping up a suitable control over the army-reserve men. On being discharged, the man receives his certificates of discharge and of conduct, both drawn up on parchment. As far as possible soldiers, who have served their time are discharged on the exact day that their time expires; this is, however, not always possible with men who are serving abroad. In this latter case the reservists are formed into bodies of men, of pretty nearly equal time of expiry, sent home on troop-ships and there discharged as soon as possible. For that purpose, special Discharge Depôts have been formed at Gosport (for infantry and cavalry), at Woolwich (for artillery and army service corps), and at Chatham (for engineers), whence they are sent off as reserve-men to their several homes. Up to the day of their discharge the men receive pay as soldiers on active service.

The men who have been on active service for 12 years are discharged in a similar manner, but they are not required to report themselves to any authority, as they do not belong to the Reserve. Those who have formed a re-engagement and earned a pension must report themselves every three months before the officer, who pays the pensions of the men in their own district.

Discharge by redemption is always admissible, except in those cases where the detachment to which the man belongs has received orders to embark, to go abroad, or go to war, or when the detachment has not its full complement of men. The amount of the redemption-money depends on the length of time the man has yet to serve. Soldiers, who have not yet served more than 3 months, may purchase their discharge for £10, but after that the discharge will depend on circumstances, and costs £18. After 12 years' service a soldier may, in certain cases, obtain his discharge free of cost.

Recruits, who have apparently made no progress within a given time, and presumably will never turn out useful soldiers, or men who, when they enlisted, were short of the desired dimensions of height and chest measurement, and have not reached them after a certain time, may, in each case, be discharged as "unlikely to make an efficient soldier."

About the discharge of soldiers by sentence of court-martial see Section III, Chapt. 3.

#### g. Service in the Reserve.

The army-reserve consists of two classes; one being bound to serve in all quarters of the world, and the other only within the limits of the United Kingdom. The second class is dying out and numbered in 1897 only 58 men. We need only consider then the first class, which consists of 4 sections:

Section A includes reserve-men of the Artillery, Foot Guards, Infantry-of-the-line, Army Service-Corps, and Army Medical Corps, who at the time of their discharge undertake for a period of 12 months to rejoin for service outside the United Kingdom, when warlike operations are in preparation or in progress, when they can be retained for a period of 12 months. At the expiration of their service in Section A, they pass to Section B or C according as their service requires. The number of men in this section is limited to 5000.

Section B is the principal section; in it are placed all those men, who have enlisted for short service time, and have discharged their duties in active service with the army.

Section C comprises those reserve-men, who have for some reason been transferred to the reserve before the expiration of their time of active service. When, however, this has run out they are moved into section B.

Section D is a special reserve comprising those men who after the expiration of their legal time of service in the reserve have engaged themselves for 4 years more. These men can only be called in after the other sections have joined the colours.

The army-reserves may be called out for an annual practice of 12 days, or to 20 special drills in every year both with the regular army, or with other troops, and they may be employed by the military or civil authorities in supporting the Civil Power.

"In case of national danger or pressing necessity" the army-reserves

may be summoned by Royal Proclamation to join the colours and fill the ranks of the standing army. In such case they are bound to remain with the colours during the whole period of their legal engagement, and in the event of war, or if they happen to be stationed in a garrison outside the limits of the United Kingdom, they have to remain with the colours one year more. As soon as a reserve-man has been called out to join the ranks, he is again a soldier of the regular army. He resumes the rank and the pay he had at the time of his discharge, and can be incorporated with any troops of the arm in which he had previously served.

No reserve-man is allowed to emigrate into the colonies or into foreign countries, and settle there. He is also forbidden to travel abroad or to engage on a seafaring life without leave previously obtained.

#### h. Service in the Militia.

As has been explained in the "Historical Introduction", the militia is theoretically recruited on the principle of Universal Military Obligation. There are two classes of militia, the "general" or "regular" militia, and the "local" militia. The former consists of a certain "Quotum" of men for each county, which are then distributed among the several parishes. All the men in the parish between the ages of 18 and 30, capable of bearing arms, are ballotted, and the highest numbers are enlisted till the required number of men is reached. The time of service is five years. Substitutes are allowed. A parish may instead of ballotted men offer volunteers as part of its contingent, but must pay a fine of £10 for every man that is short of the allotted number.

The "Local Militia" is enrolled in the same manner as the "General Militia." The limits of age are the same, but substitutes are not allowed and the time of service is only 4 years. Volunteers are admitted, and the fine for each man short of the required complement amounts to £15.

The "Local Militia" has not been enrolled since 1815, but the regulations referring to it have been revised from time to time, and still have legal validity. When after the long period of peace, the "General Militia" was re-instituted in 1852, government determined to fill its ranks with volunteers, and to have recourse to the ballot

only if the contingent allotted to each county could not be otherwise secured.

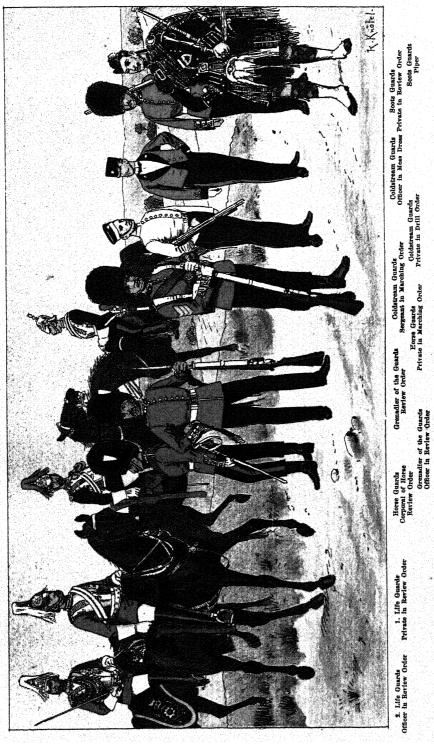
As a matter of fact the militia is recruited from such volunteers only as enlist for 6 years with leave to extend their service for further periods of four years. The minimum height of recruits for the artillery is 5 ft. 6 in., for engineers 5 ft. 5 in. (for artificers and boatmen 5 ft. 4 in.), for infantry 5 ft. 4 in., and for the medical service 5 ft. 3 in. The minimum of chest measurement is 33 in. for the artillery, engineers and medical service, and for the infantry it is 32 in. The limit of age for all services is between 18 and 35 years. Lads of 17, who presumably are still growing, may be enlisted with smaller measurements. No soldier of the militia is allowed to continue to serve, if he has passed his 45th year, but men, who have served no less than 3 years in the army or army reserve, without having earned a pension, are allowed to enter the militia within 3 years of the day of their discharge, if they are under 45 years of age.

After his enlistment the militia-man can be trained for six months at the depôt of his regiment, but this period is actually reduced to 56 days. Every section of these troops is called out once a year for drill and practice, which, according to law, is to last from 21 to 56 days, but is as a rule with few exceptions limited to 28 days.

"In case of national danger or pressing necessity" the militia, or any part of it, may be called out by Royal Proclamation, and they are then obliged to remain with the colours till they are discharged. The militia is bound to serve in every part of the United Kingdom, but not outside its limits; the Crown, however, is lawfully entitled to accept the voluntary services of any part of the militia for the Channel isles, Malta, and Gibraltar. In the Crimean war the greater part of the Mediterranean garrisons consisted of militia-men, and in 1885, when war with Russian was threatening, nearly all the corps declared themselves ready to do service in every quarter of the world.

The officers of the militia are amenable to military law at all times, but the men only during the time they are called out for drill or for constant service.

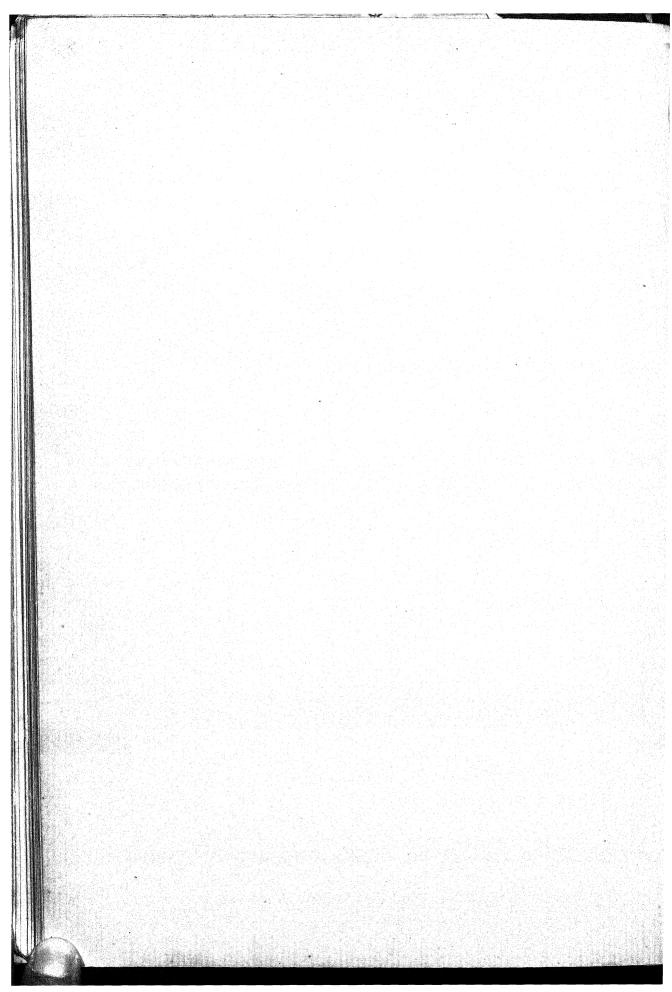
The organisation of the militia in the Channel islands is very peculiar. Its enrolment is on the basis of Universal Military Obligation, and with few exceptions all men between 19 and 60 years of age capable of bearing arms are borne on the military rolls of their respective districts. All between the ages of 16 and 20, who are



Horse Guards Private in Marching Order

Grenndler of the Guards Review Order

2. Life Guards 1. Life Guards Officer in Review Order



bound to serve, are specially trained and must go through a stated number of drill-practices every year. From their 20th year onward, they belong to the active militia and drill 9 days every year. If the ranks of the troops in active service are more than full, the oldest men are placed in the first reserve, where they remain to the end of their 45th year; they are borne on the lists of the second reserve to the end of their 60th year.

#### i. Service in the Militia-reserve.

The militia reserve is not, what its name seems to imply, a reserve for the militia, but for the regular army. It consists of militia-men, whose number must not exceed a quarter of the establishment of a battalion of infantry, or a third of a battalion of garrison artillery, and who bind themselves, in return for a bounty of £1 a year, to remain with the militia either 6 years or the whole time of their service. In case of war they enter the regular army on the same terms as the army-reserve men and can be employed in every quarter of the world. On entering the militia-reserve the men must be between 19 and 34 years of age, and must have passed through two drill periods of the militia; they are liable to be called out to a yearly practice of 56 days. Service in the militia-reserve cannot be extended beyond the age of 34. If called out to continuous service they are to be regarded as regular soldiers, and are discharged earlier or later on the same terms as the men of the army-reserve. In times of peace the men of the militia-reserve stand on the same footing as the other militia-men, and join in the yearly practice of their militia district.

### k. Service in the Yeomanry Cavalry.

The Yeomanry Cavalry are troops of volunteers that exist only in England and Scotland, and are recruited mostly from small farmers, owners of livery stables, and coach proprietors, as well as from other men who bring up their own horses. In case of an invasion or insurrection, the Yeomanry Cavalry may be called out for permanent service, and also in the place of the military to support of the Civil Power; but it cannot be employed outside the limits of the United Kingdom. The men drill either singly or in troops for 14, not necessarily consecutive days, each year, and are then assembled in Regiments for 6 days' continuous duty. In addition to this they go

through a yearly course of musketry instruction. The Yeomanry cavalry receives pay for every day spent in practice, and during that time they are under military law.

#### 1. Service with the Volunteers.

The Volunteers serve in separate regiments or sections, and receive no pay. Like the Yeomanry Cavalry they exist only in England and Scotland. Formation and strength of the different sections depend on local circumstances, and there is little uniformity in the proportion of their numbers to the population, as well as in the composition of the several units. For every man, who has been present at a certain number of drills, his corps receives a fixed yearly sum to defray the costs of uniforms, accoutrements, &c. The recruits of the Volunteers must be British subjects, between 17 and 50 years of age; they must have a height of at least 5 ft. 3 in., and chestmeasurement of not less than 32 in. For gunners of the artillery the minimum dimensions are: height 5 ft. 6 in., chest-measurement 33 in. No volunteer is allowed to serve beyond his 50th year. There is no fixed time of service, and, in time of peace, every Volunteer may resign after having given a fortnight's notice of his intention to do so. Commonly, however, Volunteers are required to engage to remain in the force till they have earned from government the cost of their uniform and accoutrements. In the 1st and 2d year they have to attend at least 30 drills of one hour's duration, and have to go through a course of target practice; in subsequent years they are required to attend only nine drills of one hour each, and pass through a course of target practice. Moreover, every Volunteer is bound to be present at the inspection of his corps, or, if he has obtained leave to absent himself from the inspection, he must make good the loss by attending two extra drills. In case of an invasion the Volunteers may be called out for permanent service in Great Britain, but not in Ireland. In time of peace these forces cannot be employed in support of the Civil power. During drill or target practice, and in permanent service, the Volunteers are under Military Law.

# II. The Component Parts of the Regular Army.

#### a. The Infantry.

IN TIME OF PEACE.

The Infantry comprises Regiments of the Guards and of the Line. The Guards consist of 3 regiments: the Grenadier Guards, the Coldstream Guards, and the Scots Guards, each of three battalions; nine battalions in all. The functions discharged by the staffs of these regiments serve administrative and disciplinary rather than tactical purposes. Of each regiment one battalion, which is relieved every year, is stationed in the Mediterranean, and the remaining battalions occupy barracks in London and in Windsor. The guards serve outside the limits of the United Kingdom (otherwise than the battalions in the Mediterranean) only in times of war, and they enjoy many privileges in addition to those of the troops of the line. It is one of their principal privileges, that they can only be brigaded with troops that are commanded by a General who is a Staff-Officer, and has served in the guards. Formerly the Captains of the guards took equal rank with Lieutenant-Colonels of the line, Lieutenants with Captains of the line, and so on. These privileges, being detrimental to the Royal service, were abolished in 1871.

The Establishment of a battalion of foot-guards consists of:

In the Mediterrane	an At Hon	ne
I	r L	ieutenant-Colonel (Commanding Officer of the battalion),
4	4 N	lajors,
4	4 C	aptains,
10	9 or 10 L	ieutenants,
8	8 S	econd Lieutenants,
τ	r A	djutant of the battalion (Captain or Lieutenant),
1	ıÇ	Quartermaster,
29	28 or 29 C	Officers;
ī	1 5	ergeant Major of the battalion (Warrant Officer);
Ī	1 (	Quartermaster sergeant,
1	ı l	Ausketry instructor sergeant,
2	2 (	Orderly Room Clerks (sergeants),
I	ı I	Drum-Major (sergeant),
10	10 (	Colour sergeants (8 for the companies, 2 drillsergeants and fencing masters),
1	1 (	Cook (sergeant)

In the Mediterranean	At Home
I	I Pioneer (sergeant),
24	24 Sergeants,
41	41 Sergeants;
16	16 Drummers,
40	40 Corporals,
	[ 784 Privates in the battalion at home first for foreign service in each regiment,
880	704 Privates in the battalion at home last for foreign service in each regiment.

The battalions of the Scots Guards have in addition 1 sergeant-piper and 5 pipers.

The battalion is divided into 8 companies. The Senior Major discharges almost the same functions in the battalion as the Staff-Officer on the establishment of a German regiment of infantry.

#### A Regimental Staff consists of:

- I Colonel (Commanding Officer of the regiment),
- 1 Adjutant of the regiment (Captain or Lieutenant),
- 2 Officers;
- I Bandmaster,
- 1 Orderly Room Clerk,
- 2 Warrant Offiers.

The clerical work that the regimental staff requires is done by clerks drawn from the battalions.

All three regiments have a common depôt at Caterham in the south of London, where all the recruits are drilled till they are fit to enter the ranks. This depôt has a staff of I Major, I Adjutant (Lieutenant), both seconded officers of one of the regiments of the Guards, I Quartermaster, I Sergeant Major of the Depôt (Warrant Officer), 2 Quartermaster-Sergeants, I clerk (Sergeant), and I Sergeant Pioneer. In addition, each regiment of the Guards has a Depôt detachment of I Captain and I Lieutenant, 2 colour sergeants, 5 sergeants, 3 drummers, 8 corporals and 70 privates.

The Infantry-of-the-line consists of 69 regiments, 67 of which are recruited from certain territorial (regimental) districts, and 2 ("King's Royal Rifles" and "The Rifle Brigade") from the whole kingdom. As has already been stated in the "Historical Introduction" the regiments of higher numbers than 25, which up to 1881 had consisted of only one battalion, were in that year incorporated in pairs as single regiments. With all the regiments the old numbers were dropped, and

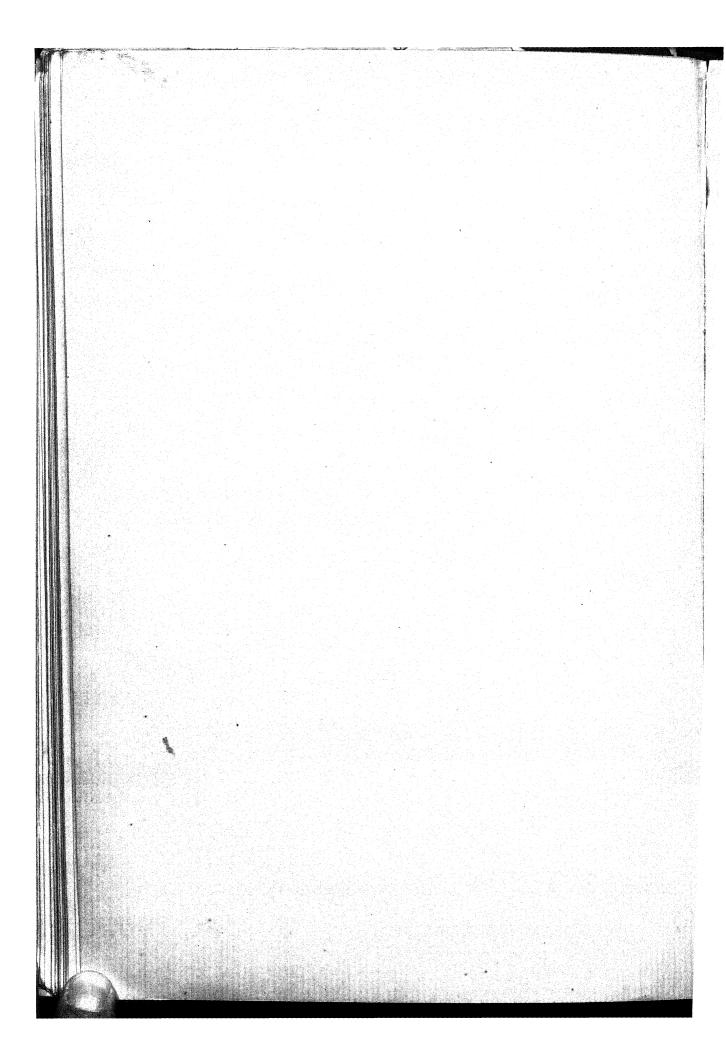


Royal Irish Rifles Lleutenant in Drill Order

> South Wales Borderers Corporal in Marching Order with white helicat

Connaught Rangers Sergeant in Review Order

Norfolk Regt. Lieutenant in Marching Order



at present only the earlier number of the oldest of the two battalions is retained as the regimental district number, so that the sequence of numbers is very incomplete.

Of the 67 territorial regiments, three, the Royal Warwickshire. Royal Fusiliers, and Lancashire Fusiliers have each four regular battalions, the remainder each two regular battalions. Of these one (or two in the case of the 4 battalion regiments) is in garrison outside. and the other within the limits of the United Kingdom. The latter. as has already been said, trains all the recruits, and makes good the losses in men of the battalions serving in the colonies or in India. It rarely happens that a battalion is in garrison in its own district; on the contrary it is removed about every two years from one garrison to another, and a considerable number of the troops at home are stationed in the south of England and in Ireland, as will be seen from Chapter VII of this section. Every 16 years the battalion abroad is relieved by the home battalion; but the former leaves behind all the men that have yet to serve two years, and these are transferred to the relieving battalion. On the other hand the relieving battalion passes over to the one that is returning home all the men who are not yet sufficiently trained or are too young for foreign service. It does happen some times that both the battalions of a regiment are stationed abroad; in that case the establishment of the regimental depôt is increased till it is able to replace the losses of both the battalions. There being in most of the barracks for the regimental depôts no room for such specially formed corps, these are combined as a "provisional battalion" in the camp at Shorncliffe. The regimental depôt remains permanently in the head quarters of the regimental district; there the recruits are trained for 21 months, ere they are sent to the battalion serving at home. To every territorial regiment of foot belong also one to four battalions of Militia, which are respectively designated as third (or fifth) to sixth (or seventh) battalion. The cadres of these also are mostly quartered at the depôt, and their recruits are drilled in common with the battalions of the regulars. The battalions of Volunteer infantry of the regimental district also belong to the territorial regiment, but are numbered separately and consecutively beginning with I, and are not numbered in the same sequence as the battalions of regulars and of militia. All the battalions of militia and volunteers of the regiment as well as the regimental depôt are under the immediate orders of the Commander of the regimental district, who is Colonel discharging functions that in the main are administrative.

Each of the two above named regiments of "Rifles" consists of four battalions of Regulars, and four of Militia, and they have a common depôt at Winchester (just now at Gosport). They are mostly, nay preferentially, recruited from London and are distinguished from the other regiments of infantry only by their uniform, which, by the bye, is also worn by two territorial "Rifle" regiments. They also have one half of the battalions of regulars at home and the other half in garrisons abroad.

The following register of the regiments of infantry stating the numbers of the regimental districts as well as the number of the battalions of the different kinds of arms will help to explain the organisations of the Militia and Volunteers as described in Chapters III and V.

Number of the Regimental- District	Name of the Regiment	Number of the Battalions of	
Numb Regi		Militia	Volun- teers
1.	Royal Scots (Lothian Regiment)	1	81
2.	The Queen's (Royal West Surrey Regiment)		4
3.	The Buffs (East Kent Regiment)	1	2
4.	The King's Own (Royal Lancaster Regiment)	2	I
5.	Northumberland Fusiliers	I	3
6.	Royal Warwickshire Regiment	2	2
7.	Royal Fusiliers (City of London Regiment)	3	3
8.	The King's (Liverpool Regiment)		7
9.	Norfolk Regiment	2	4
10.	Lincolnshire Regiment	2	2
II.	Devonshire Regiment	2	5
I 2.	Suffolk Regiment	2	4
13.	Prince Albert's (Somerset Light Infantry)	2	3
14.	Prince of Wales's Own (West Yorkshire Regiment).	2	3
15.	East Yorkshire Regiment	I	2
16.	Bedfordshire Regiment	2	3
17.	Leicestershire Regiment	I	1
18.	Royal Irish Regiment	3	
19.	Princess of Wales's Own (Yorkshire Regiment)	2	2
20.	Lancashire Fusiliers	2	3
21.	Royal Scots Fusiliers	I	3
22.	Cheshire Regiment		5
23.	Royal Welsh Fusiliers	2	3
24.	South Wales Borderers	2	5
25.	King's Own Scottish Borderers	I	3

<sup>&</sup>lt;sup>1</sup> One "corps" of these has 3 battalions.

Number of the Regimental- District	Name of the Regiment		Number of the Battalions of		
Numb Regi Di		Militia	Volun teers		
26.	The Cameronians (Scottish Rifles)	2	4		
27.	Royal Inniskilling Fusiliers	3	*****		
28.	Gloucestershire Regiment	2	2		
29.	Worcestershire Regiment	2	2		
30.	East Lancashire Regiment	1	2		
31.	East Surrey Regiment	2	4		
32.	Duke of Cornwall's Light Infantry	1	2		
33-	Duke of Wellington's (West Riding Regiment)	T	3		
34.	Border Regiment	2	2		
35.	Royal Sussex Regiment	I	3		
37.	Hampshire Regiment		5		
38.	South Staffordshire Regiment	2	3		
39.	Dorsetshire Regiment	1	1		
40.	Prince of Wales's Volunteers (South Lancashire Regt.)	1	2		
41.	The Welsh Regiment	1	4		
42.	The Black Watch (Royal Highlanders)	1	6		
43.	Oxfordshire Light Infantry	2	4		
44.	Essex Regiment	2	4		
45.	Sherwood Foresters (Derbyshire Regiment)	2	4		
47.	Royal North Lancashire Regiment	I	2		
48.	Northamptonshire Regiment	2	I		
49.	Princess Charlotte of Wales's (Royal Berkshire Regt.)	I	1		
50.	The Queen's Own (Royal West Kent Regiment)	Y	3		
51.	The King's Own (Yorkshire Light Infantry)	1	1		
53.	The King's (Shropshire Light Infantry)	2	3		
57.	The Duke of Cambridge's Own (Middlesex Regt.)	2	3		
	The King's Royal Rifle Corps	4	13		
62.	The Duke of Edinburgh's (Wiltshire Regiment)	1	2		
63.	Manchester Regiment	2	6		
64.	The Prince of Wales's (North Staffordshire Regt.) .	2	2		
65.	York and Lancaster Regiment	1	2		
68.	Durham Light Infantry	2	5		
71.	Highland Light Infantry	2	5		
72.	Seaforth Highlanders (Rossshire Buffs, The Duke of Albany's)		3		
75.	Gordon Highlanders		6		
79.	The Queen's Own Cameron Highlanders	1	1		
83.	Royal Irish Rifles	4	-		
87.	Princess Victoria's (Royal Irish Fusiliers)	3			
88.	The Connaught Rangers	3	and the second		
91.	Princess Louise's (Argylland Sutherland Highlanders)		7		
100.	Prince of Wales's Leinster Regt. (Royal Canadians).	3	-		
101.	Royal Munster Fusiliers	3	17.		
102,	Royal Dublin Fusiliers				
	The Rifle Brigade (Prince Consort's Own)		11		

There are then in all 69 regiments of regulars of Infantry-of-theline, numbering 148 battalions.

The establishments of the battalions vary according as to whether they are in garrison at home, in the colonies, or in India.

		Battalions	
at	home	in the colo- nies	in India
Lieutenant-Colonel (Commander of the bat	•	mos	
talion)	. I	I	1
Majors	• 3	4	4
Captains		5	5
Lieutenants	. 8	8	9
Second Lieutenants		8	8
Adjutants of the battalion (Captains of	r		
Lieutenants)		1	1
Quartermaster	. I	I	1
Total of Officers	24	28	29
Sergeant Majors of the battalion	. I	1	I
Bandmaster	. I	1	I
Total of Warrant Officer	s 2	2	2
Quartermaster Sergeant	. I	1	I
Musketry Instructor Sergeant	. I		
Orderly Room Sergeants	. 2	2	2
Colour Sergeants of Companies	. 8	8	8
Drum Majors (Sergeants)		<b>I</b>	1
Cooks (Sergeants)		1	-
Pioneers (Sergeants)		1	1
Sergeants	. 24	32	32
Total of Sergeants	39	46	45
Drummers (buglers)	16	16	16
Corporals	40	40	40
Privates	760	880	900

The battalions of the regiments of Scotch Highlanders have, in addition to the above, I piper (sergeant), and 5 pipers. Of the battalions serving within the United Kingdom 30 have each 5, and 42 have each 3 beasts of burden. The 3 battalions in Egypt have each 16 such animals.

A battalion consists of eight companies, commanded by Majors or Captains. The Senior Major discharges the functions of Staff Officer of the Establishment.

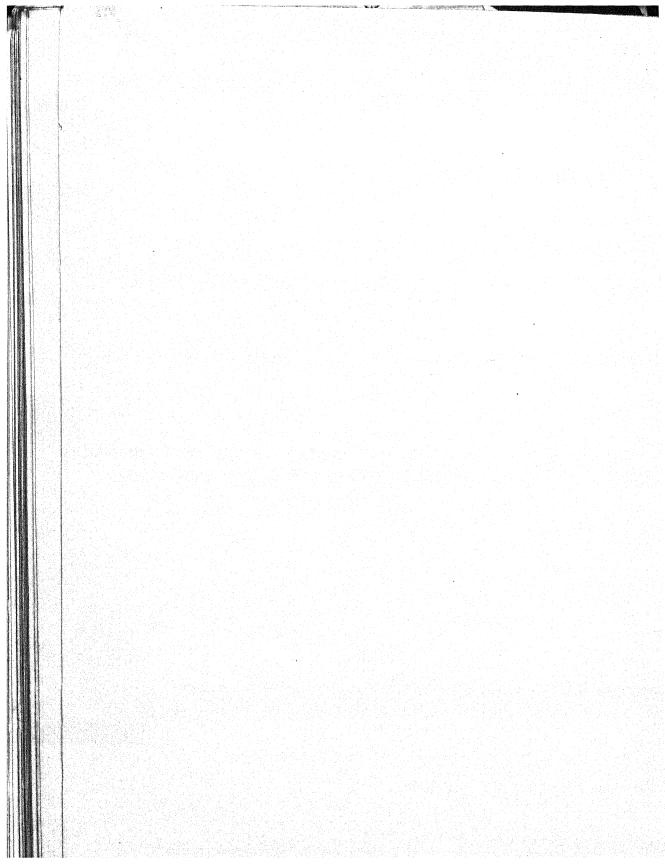
The normal Establishment of a regimental Staff and Depôts consists of:

- 1 Colonel, Commander of the regimental district,
- ı Major, """, depôt,

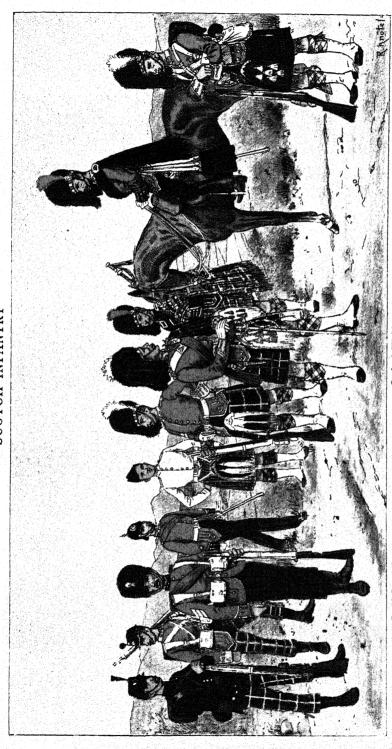


Princess Louise's Argyll and Sutherland Highlanders

Band Sergeant (on duty) Sergeant (Review Order)



# SCOTCH INFANTRY

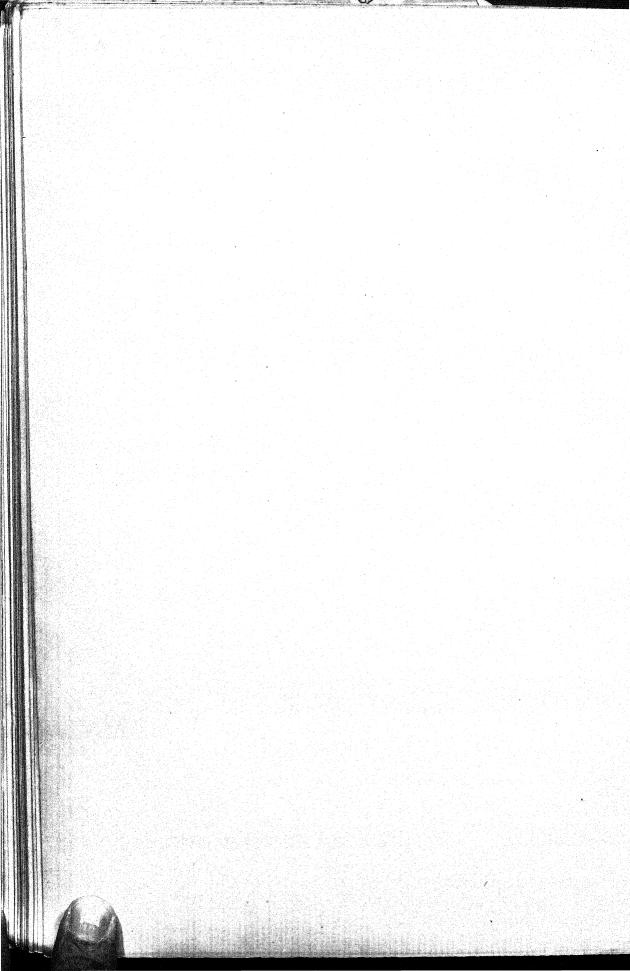


Scottish Rifles Royal Scots Fusiliers Cameron Private in Marchine Order Sergwant in Marching Order Private Highland Light Inf. Royal Scots Private Private in Marching Order Warman Univer in Review Order

Highlanders Seaforth Highlanders n Drill Order Lieutenant in Review Order Gordon Highlanders Royal Highlan

Gordon Highianders Royal Highlanders Corporal in Review Order Piper in Marching Order

iders Argyll & Sutherland Highlanders



- 1 Captain,
- 2 Lieutenants,
- 5 Officers;
- I Sergeant Major of the depôt (Warrant Officer),
- I Quartermaster sergeant,
- 1 Orderly room sergeant,
- 4 Colour Sergeants,
- 3 Sergeants,
- 9 Sergeants;
  - 2 Drummers.
- 1-2 Orderly room clerks (according to the number of Militia battalions),
  - 10 Corporals,
  - 40 Privates.

If it happens that both the battalions of a regiment are serving abroad, then the depôt is increased by I major, 2 captains, 6 lieutenants, I sergeant musketry-instructor, 2 colour sergeants, I7 sergeants, 4 drummers and 550 corporals and privates. In the present financial year this is the case with 7 regiments. As has been explained above, these depôts with full establishments, or at least a part of them, are combined into a provisional battalion in the Shorncliffe camp.

The full dress uniform of the infantry consists of a scarlet tunic with white piping, collars and facings of various colours, and darkblue trousers with scarlet piping. In marching order instead of the scarlet tunic a scarlet serge frock is worn, but its collar and facings are identical with those of the tunic. The guards wear a short white jacket instead of the serge frock. The collars and Brandenburg facings of the guards are darkblue; the latter have white lace. Soldiers of the line wear Swedish facings, the colour of which as well as of the collar is dark blue for all the "Royal", "King's" or "Queen's" regiments; white for the other English regiments, yellow for the Scotch regiments, and grassgreen for the Irish regiments. With the Scotch regiments the coat has a peculiar "national" cut both in the lappets and in the facings. The Scotch Lowlanders have tartan trousers (trews), but the five Highland regiments wear kilts of the regimental tartan with horsehair sporran, stockings, and white gaiters, in full dress they follow the national custom of wearing no breeches. In undress these latter regiments wear white jackets and tartan trousers. On the (red) shoulder-straps of all the regiments the initial letter of the name of the regiment or sometimes the full name is embroidered in white. The guards wear blue shoulder-straps with the corresponding regimental emblems. The badges or crests of the There are then in all 69 regiments of regulars of Infantry-of-theline, numbering 148 battalions.

The establishments of the battalions vary according as to whether they are in garrison at home, in the colonies, or in India.

		Battalions	
	at home	in the colo- nies	in India
Lieutenant-Colonel (Commander of	the bat-		
talion)	I	1	ı
Majors	3	4	4
Captains	6	5	5
Lieutenants		8	9
Second Lieutenants	4	8	8
Adjutants of the battalion (Capt	ains or		
Lieutenants)	1	I	, <b>I</b> .
Quartermaster	1	I	1
Total of C	Officers 24	28	29
Sergeant Majors of the battalion .	r	I	. 1
Bandmaster	r	1	1
Total of Warrant	Officers 2	2	2
Quartermaster Sergeant	1	I	I
Musketry Instructor Sergeant			
Orderly Room Sergeants		2	2
Colour Sergeants of Companies		8	8
Drum Majors (Sergeants)	I	I	I
Cooks (Sergeants)	I	Ī	
Pioneers (Sergeants)		ī	1
Sergeants	24	32	32
Total of Ser	geants 39	46	45
Drummers (buglers)	16	16	16
		40	40
Corporals	760	880	900

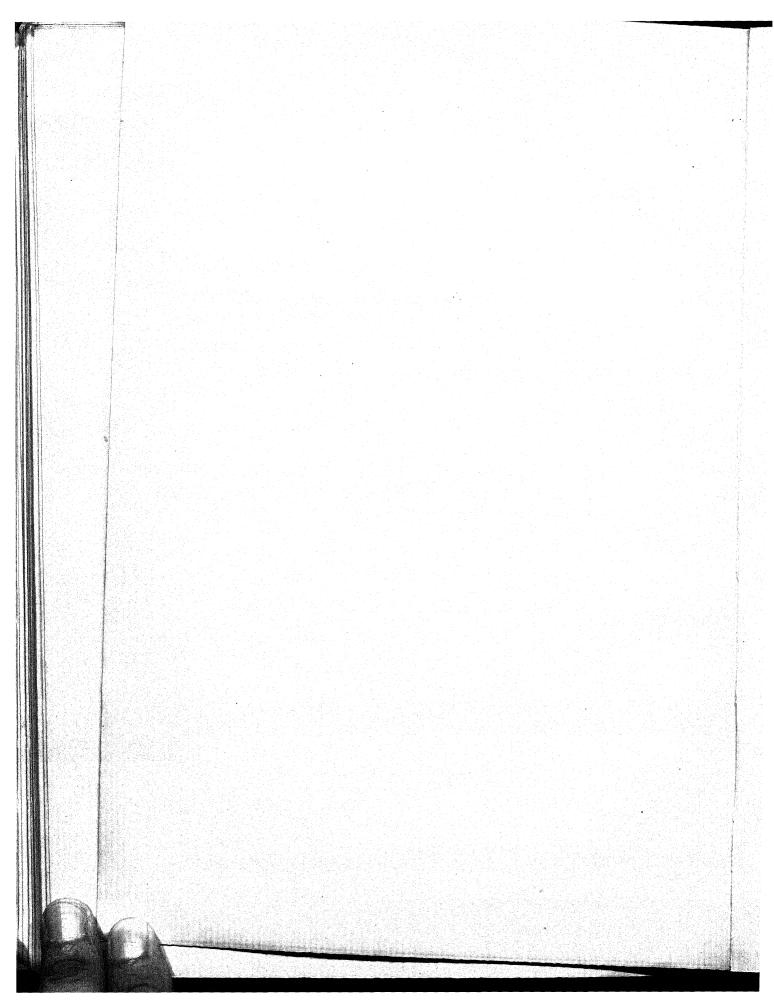
The battalions of the regiments of Scotch Highlanders have, in addition to the above, I piper (sergeant), and 5 pipers. Of the battalions serving within the United Kingdom 30 have each 5, and 42 have each 3 beasts of burden. The 3 battalions in Egypt have each 16 such animals.

A battalion consists of eight companies, commanded by Majors or Captains. The Senior Major discharges the functions of Staff Officer of the Establishment.

The normal Establishment of a regimental Staff and Depôts consists of

1 Colonel, Commander of the regimental district,

1 Major, " " " depôt,



- I Captain,
- 2 Lieutenants,
- 5 Officers;
- I Sergeant Major of the depôt (Warrant Officer),
- 1 Quartermaster sergeant,
- 1 Orderly room sergeant,
- 4 Colour Sergeants,
- 3 Sergeants,
- 9 Sergeants;
- 2 Drummers,
- 1-2 Orderly room clerks (according to the number of Militia battalions),
  - 10 Corporals,
  - 40 Privates.

If it happens that both the battalions of a regiment are serving abroad, then the depôt is increased by I major, 2 captains, 6 lieutenants, I sergeant musketry-instructor, 2 colour sergeants, 17 sergeants, 4 drummers and 550 corporals and privates. In the present financial year this is the case with 7 regiments. As has been explained above, these depôts with full establishments, or at least a part of them, are combined into a provisional battalion in the Shorncliffe camp.

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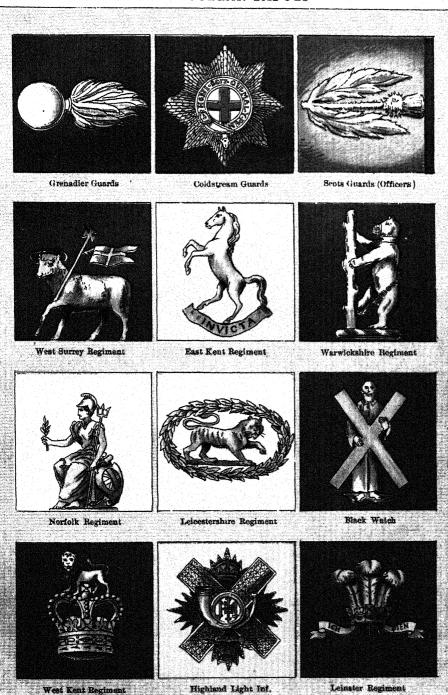
The Rifles have darkgreen uniforms, similar in cut to that of the foot soldiers of the line; collar and facings of the King's Rifles are scarlet, of the Rifle Brigade black, of the Irish Rifles grassgreen, and of the Scottish Rifles darkgreen; the buttons of all of them are bronze. Their head dress is a low fur cap with upright horsehair plume. The Scottish Rifles have uniforms of Scotch cut, tartan trousers, and shakoes.

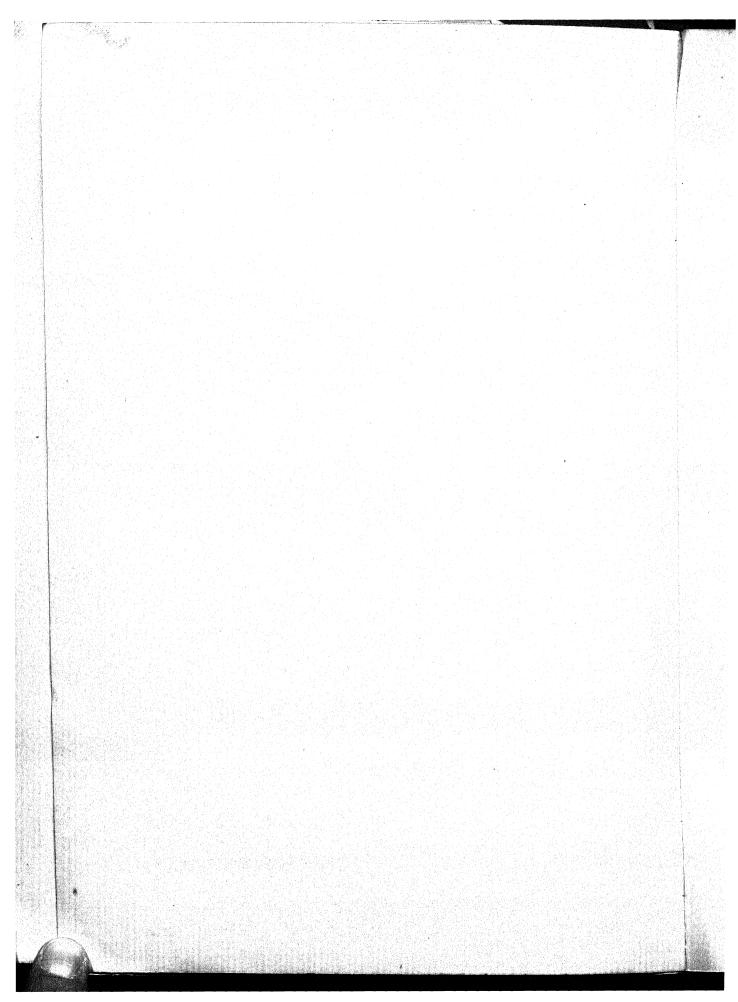
The cloaks of the infantry are uniformly dark gray; the foot covering consists of lace boots with black gaiters, which reach half way up the calves of the legs; the Highland regiments wear shoes and white canvas gaiters.

The officers' uniforms are like those of the men, but their tunics are embroidered with gold on collar and facings, and the shoulder straps are of plaited gold cord. In undress uniform the officers wear caps of the same pattern as those of the men, and darkblue serge frocks, or, when on duty with the men, scarlet serge frocks. Brown leather belts are worn in marching order.

The badges of rank which are the same for all arms are: Second-Lieutenants have shoulder-straps without any badge, Lieutenants have one and Captains two stars on the shoulder-strap. All the Field-Officers (officers of the rank of Major and higher ranks) are distin-

# ARMY: COLLAR BADGES





guished by a crown, and in addition the Lieutenant-Colonel has one star, and the Colonel two stars. The embroidery on the sleeves of the coats varies according to the rank; the higher the rank, the richer the embroidery. Serge frocks and all undress uniform have no gold embroidery.

Infantry officers (not Rifles) wear also sashes of crimson silk with fringes over the left shoulder.

Warrant officers have the same uniform as the men but embroidered collar and facings, and in addition a crown on the lower sleeve of the right arm.

Non-commissioned officers are distinguished by stripes on the right upper arm in  $\bigvee$  shape pointing downwards.

Colour Sergeants have three gold stripes with crossed flags over them; sergeants have three gold, corporals two white, and lance-corporals one white woollen stripe. Sergeants and warrant officers have sashes of crimson wool, which contrary to those of the officers are hung over the right shoulder towards the left hip. Bandsmen are distinguished by wings (cloth stiffened with buckram worn on the shoulder and protrading over the sleeve, in the guards by gold lace on breast and sleeves); pioneers are distinguished by crossed axes, and signalers by crossed flags on their right sleeves.

Outside the limits of the United Kingdom all the regiments wear white tropical helmets, and within the tropics even uniforms of white drill. In India are worn both in times of peace and of war uniforms of light brown drill (called khaki), and white helmets with light brown covers.

The accoutrements of the infantry consists of belt and braces of white (with Rifles of black) leather; in war, however, all white leather is coloured brown. In front of the belt are worn two white or black leather pouches, each containing 50 cartridges; bayonet and intrenching tool are worn on the left side. The havresack of white canvas with strap of the same material is worn on the left side, water-flask (newest pattern of aluminium covered with felt) on the right side. The cloak rolled up is buckled to the back of the belt, and above it at the crossing point of the braces are fixed the cooking utensils, which are made of aluminium. The knapsack made of black leather is buckled on to the upper part of the shoulder-straps. It contains: I shirt, I pair of stockings, I pair of lace-shoes of canvas with leather strappings, the field cap, I pair of spare lace-boots, I cape, I emergency ration, I oil flask, I towel, I piece of soap, I clothes

brush, I comb, I knife, I fork, I spoon, sewing material and the paybook. The needful lint and bandages are sewn on in front of the lappet of the blouse. In marching order the footsoldier carries inclusive of uniform and arms a weight of about half a hundred weight. In the tropics the men do not carry their own knapsacks, but these are brought by pack animals or in carts.

The arm of the footsoldier is the Lee-Enfield-rifle with short bayonet (see Section II, Ch. I). Warrant officers and Staff-sergeants have officers' swords in black leather scabbards and revolvers; drivers are armed with revolvers only, drummers, buglers and pioneers with sword bayonets.

Excepting the Rifles every battalion of infantry has two colours, which are carried by officers. The first, the "Queen's Colour", is the same for all regiments, viz: the "Union Jack" with the name of the regiment in the centre, and the number of the battalion on the top near the staff. The second, the "Regimental Colour", is of the same colour as the collars and facings of the regiment; if these are white, the colour is distinguished by a broad red cross. On the colour are emblazoned the name of the regiment, the names of the battles it has taken part in, the different badges, crests, and mottoes, which have been bestowed on the regiment. The "Queen's Colour" of the foot-guards is of crimson silk.

#### IN WAR.

The tactical Units of the British infantry in war are the battalions, which are not linked into regiments, but are placed under the direct orders of the officer commanding the brigade. The battalion on the peace-footing consists of 8 companies, and according to the "Field Army Establishments" of 1898 its numbers are:

Commander of the Battalion (LtCol.) 1	with 2 horses
Majors 4	(Senior with I horse)
Captains 5	
Lieutenants and Second Lieutenants 16	(I horse for the transport officer)
Adjutant of Battalion 1	1 horse
Quartermaster	I horse
Total of officers 28	
Sergeant-major (warrant officer) I	
Quartermaster sergeant	
Band Sergeant	
Drum major (sergeant)	
Orderly-room Sergeant 1	
Armourer sergeant	
골시 원급인 사람이 되었다. 그리고 있는데 그 없었는데 그리고 있는데 그 사람이 없었다.	크리이 모든 학계 시간 하지 않는 지하고 하다면 걸어 했다.

Machine gun sergeant	
Transport Sergeant	1 horse
Signalling sergeant	
Cook (sergeant)	
Pioneer (sergeant)	
Orderly room clerk	
Company Colour Sergeants 8	
Sergeants 32	
Total of Sergeants 51	
Corporals (inclusive of Band corporal) 41	
Drummers (buglers) 16	
Pioneers 10	
Bandsmen 20	
Privates (of whom 3 for machine gun) 824	
Privates acting as drivers 18	32 draught horses and 2 sumpter
Total of men from the corporal downwards 929	horses.

There is also told off to the battalion I surgeon with I horse. Accordingly the battalion numbers 1010 men with 42 saddle-draught and pack horses. Scotch battalions have in addition I sergeant piper and 5 pipers.

The Service train of the battalion is under the command of a lieutenant, assisted by a sergeant (both mounted), and consists of:

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I machine gun and carriage with I horse,
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in all 11 carts with 28 draught horses, 4 spare draught horses. The 2 pack animals are usually mules and carry ammunition.

The battalion numbers 904 men armed with rifles, each carrying 100 cartridges. Besides these 68 boxes each containing 1100 cartridges are carried with the battalion, which furnish a supply of 85 additional cartridges for each probable combattant (880 men). These reserve cartridges are distributed as follows:

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In the ammunition carts 16 boxes each, together . . . . 64 boxes on the two mules carrying ammunition 2 boxes each, together 4 , total 68 ,
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The pioneers' tools consist of 432 entrenching tools (to be carried by the men), 28 shovels, 25 pick axes, 4 spades, 23 large and

I two wheeled cart for pioneers' tools with 2 horses,

<sup>1 , ,</sup> medical stores with I horse,

<sup>4 , ,</sup> carts , ammunition with 2 horses each,

<sup>4</sup> four wheeled wagons (1 for baggage, 1 for stores and 1 for supplies)
with 2 horses to each wagon,

17 small axes, 45 bill hooks, 4 saws, 12 crowbars, 20 sandbags and 20 reaping hooks, which are partly carried by the pioneers of the battalion, and partly brought up by the carts for pioneers' tools.

# Mounted Infantry.

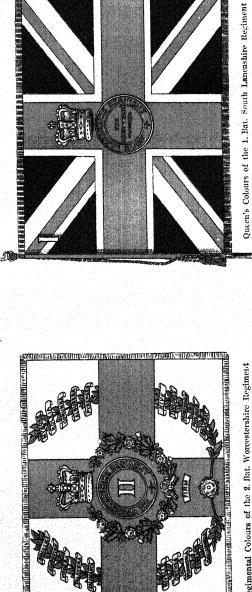
The formation of mounted infantry is an organisation peculiar to the British army; in times of peace it does not exist as a separate body of troops, but is raised on the occurrence of war from men picked for that purpose from among the different regiments of infantry. According to our system the companies of mounted infantry are to be formed in the act of mobilisation, and each such company then consists of 4 troops of 32 men and 1 officer. The 4 troops of a company are raised from 4 different battalions of the same military district, and are composed of picked men, who must have served at least two years, and belong to the first class of marksmen. In the camps at Aldershot and the Curragh in Ireland a number of small horses is kept for giving the companies a 2½ months' training by turns. The men are taught riding and stable duty; they are drilled on horseback in single rank as far as is necessary for the purposes of marching and of combat, in mounting and dismounting, and in firing on the field of battle.

In times of war a company of mounted infantry consists of:

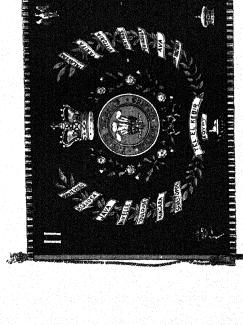
Major or Captain	I	with	2 horses
Lieutenants			8 "
Colour Sergeant of Company	1	17	1 horse
Sergeants	4	,,	4 horses
Corporals	6	"	6 "
Farrier-sergeants \ from the cavalry	Į I	,,	1 horse
Farriers reserve	14	. ,,	4 horses
Buglers	2	37	2
Privates	97		97
Privates acting as drivers, &c	9	*1	12 "
Officers' servants, grooms and cooks .	12	"	5 "
Saddler	I	22	

Total 141 men 142 horses.

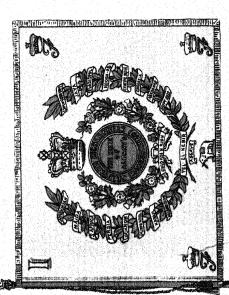
Every company has two wagons for baggage and provisions. If a Brigade of cavalry is formed there are added to it a detachment of mounted infantry, consisting of 2 companies with a staff and a section of 2 machine guns numbering in all 12 officers, 294 other ranks, 310 horses, 2 machine guns, and 9 other vehicles.



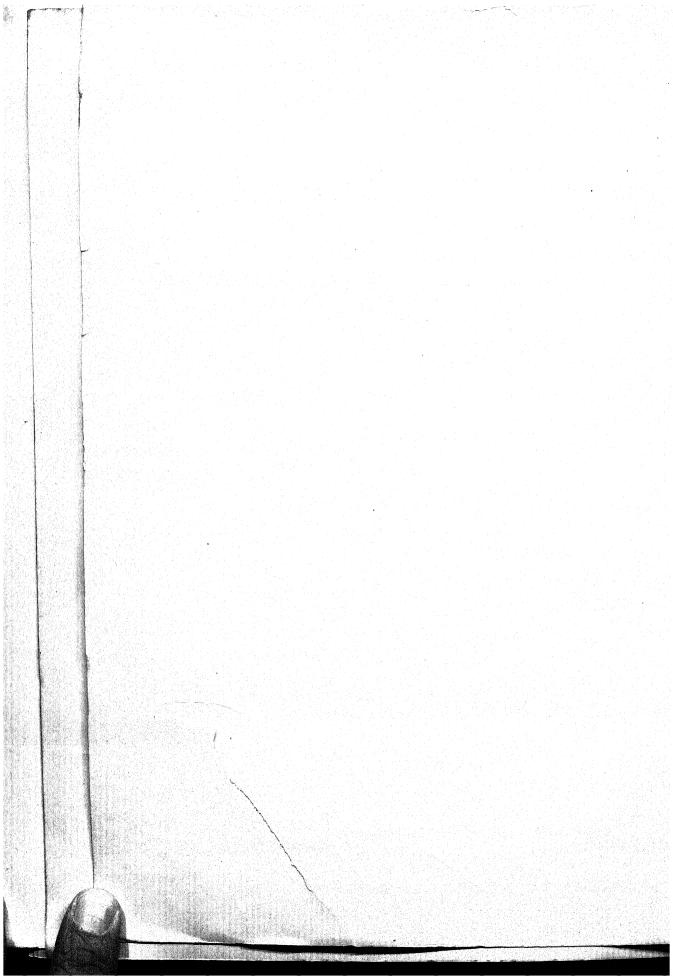
Regimental Colours of the 2, Bat. Worcestershire Regiment



Regimental Colours of the 2. Bat. Royal Irish Fusiliers



Regimental Colours of the 1. Bat, Scaforth Highlanders



The mounted foot-soldiers retain the uniform and equipment of their battalion; only instead of the dark blue trousers they wear riding breeches of strong light brown cloth with blue puttees. Instead of cartridge pouches cartridge bandoleers are worn.

In the machine gun sections joined to the mounted infantry, the Maxim guns are placed on limbers and drawn by two horses whose driver is mounted. Such a section numbers: I lieutenant, I sergeant, I corporal, I4 privates, 18 horses, 2 Maxim guns, and 2 ammunition wagons. On every gun carriage two men are seated near the gun, and two men ride along side of it. The ammunition carried with it consists of 7000 cartridges on the two carriages, besides 35,200 in the two ammunition wagons.

# b. Cavalry.

# IN TIMES OF PEACE.

Like the infantry so the cavalry also consists of regiments of the guards and of the line. The former comprise only three regiments of cuirassiers, which are designated as the 1st and 2d regiment of Life Guards and Royal Horse Guards (the Blues), and are permanently garrisoned in London (2 regiments) and in Windsor.

The cavalry of the line consists of 28 regiments, divided into two series. The first (the Dragoon Guards), includes the old "Heavy" Cavalry cuirassier regiments of the line; these latter have mostly been gradually converted into regiments of hussars, and of lancers, but have retained their former numbers. The latter series comprises 21 regiments, viz: 3 regiments of dragoons, 13 of hussars, and 5 of lancers. The following list enumerates all the cavalry regiments of the line:

1st (King's) Dragoon Guards
2d Dragoon Guards (Queen's Bays)
3d (Prince of Wales's) Dragoon Guards
4th (Royal Irish) Dragoon Guards
5th (Princess Charlotte of Wales's) Dragoon Guards
6th Dragoon Guards (Carabiniers)
7th (Princess Royal's) Dragoon Guards
1st (Royal) Dragoons
2d Dragoons (Royal Scots Greys)
3d (Kings's Own) Hussars
4th (Queen's Own) Hussars
5th (Royal Irish) Lancers
6th (Inniskilling) Dragoons

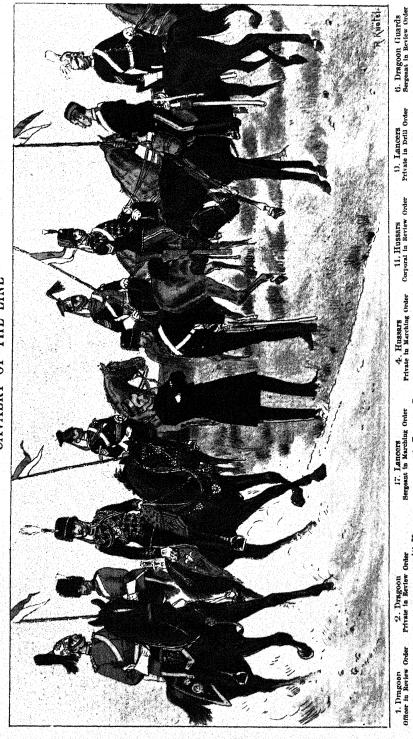
7th (Queen's Own) Hussars
8th (King's Royal Irish) Hussars
9th (Queen's Royal) Lancers
10th (Prince of Wales's Own Royal) Hussars
11th (Prince Albert's Own) Hussars
12th (Prince of Wales's Royal) Lancers
13th Hussars
14th (King's) Hussars
15th (King's) Hussars
16th (Queen's) Lancers
17th (Duke of Cambridge's Own) Lancers
18th Hussars
19th (Princess of Wales's Own) Hussars
20th Hussars

21st (Empress of India's) Lancers.

Of these 28 regiments 16—the 1st, 2d and 6th dragoons—the 7 regiments of dragoon guards, and 6 of lancers—belong to the heavy cavalry, and the 12 regiments of hussars to the light cavalry. In peace time the regiments of line cavalry relieve each other in India and in the colonies. If a regiment proceeds to India it leaves its horses behind in England, and on arrival at its destination is mounted on the horses of the regiment which is to be relieved, and which in its turn on arriving at home takes possession of the horses that had been left behind. The cavalry regiments are not recruited from any particular district, but are drawn from every part of the whole kingdom; the only exception to this practice is the 2d regiment of dragoons, which is enlisted principally in Scotland. There is a common depôt in Canterbury (Kent) for all the regiments garrisoned in the colonies.

The establishments of the regiments are as follows:

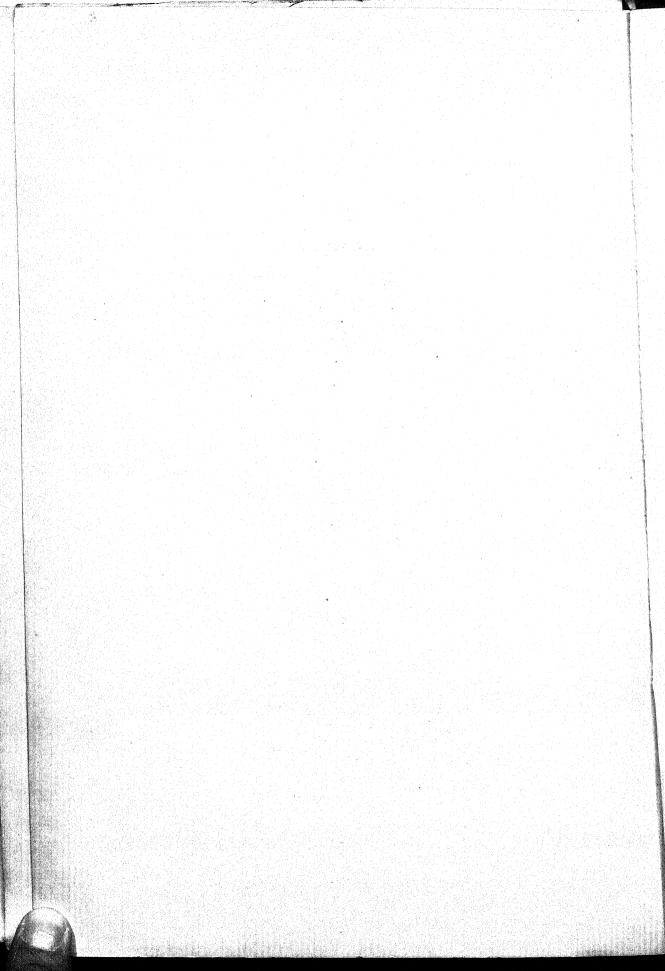
Lieutenant Colonel (Commander of	Guard Ca- valry	Regts. of the line in India	Regts. of the line in Egypt	Regts. of the line in the Colonies		Lower Establish- ment ment
the Regiment)	Í	Ĩ	I	1	I	1
Majors	3	4	4	4	4	4
Captains	6	5	3	3	4	4
Lieutenants	8	9	7	7	8	8
Second Lieutenants	3	7	3	6	6	2
Adjutant (Captain or Lieutenant) .	I	I	I	I	I	I
Riding Master	I	I	I	I	I	I
Quarter Master	r	1	1	1	ı	1
Total of officers	24	29	21	24	26	23



5. Lancers Sergeant in Review Order

4. Dragoon Guards Officer in Undress

10. Hussars Officer in Review Order



	Ca.	Regts. of the line in India	Regts. of the line in Egypt	Regts. of the line in the Colonies	line a	of the
	Guard Ca valry	Regts. line in	Regts. of the line in Egypt	Regts. of the line in the Colonies	Higher Establish- ment	Lower Establish- ment
Regimental Sergeant Major	1	1	I	I	1	1
Bandmaster	Ţ	1	1	Ī	1	. 1
Total of Warrant Officers	2	2	2	2	2	2
Quartermaster Sergeant	I	I	1	1	I	I
Farrier Sergeant	1	1	I	1	1	1
Saddler "	1	1	1	1	1	1
Squadron SergtMajor Rough Rider	1	1	1	1	1	I
Sergeant instructor in Fencing	ı	1	1	I	1	I
Orderly room sergeant	1	1	r	I	r	. <b>I</b>
Sergeant tailor	MA-1001	-	1	1	ι	1
Pay sergeant	1	-	-	-		nauma
Sergeant trompeter	1	I	1		I	1
Sergeant Cook	1	-	1	1	1	I
Squadron Sergeant Majors	4	5	3	3	4	4
Squadron Quartermaster Sergeants.	4	4	4	4	4	4
Sergeant Farriers	8	4	4	4	4	4
Sergeants	28	33	20	26	29	23
Orderly room clerk	-	1	I	Ţ	1	I
Total of Sergeants	53	54	41	47	51	45
Corporals	16	31	20	26	30	24
Corporal farriers	4	3	3	3	3	3
Farriers	4	11	7	10	11	8
Saddlers and Assistant Saddlers	2	4	3	3	4	4
Wheeler	ı	I	I	1	I	1
Privates	316	480	383	470	560	460
Trumpeters	8	9	7	7	8	8
Total from Corporal downwards	351	539	424	520	617	508
Troop Horses	275	525	361	433	465	343

The three regiments stationed in Egypt and the Colonies have each a depôt of 2 officers, 4 sergeants, 111 rank and file, and 27 horses. In the United Kingdom 8 regiments are placed on the higher establishments, 8 on the lower. These different establishments are based on the fact, that the regiments returning from India or the colonies are placed on the lower, and gradually move up to the higher establishment.

A cavalry regiment is divided into 3 active and 1 reserve squadrons, commanded by Majors or senior captains. The senior Major is as second in command a regimental staff officer; junior captains and lieutenants are in command of troops. When the regiment

embarks for active service the depôt is formed by the reserve squadrons.

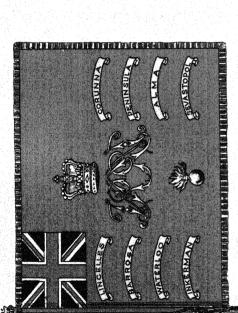
The Uniform of both regiments of Life Guards consists of red tunics with blue facings, collars and shoulder cords, all gold embroidered, white leather breeches, long jackboots, steel helmets with white horsehair plumes, steel cuirasses, and white gauntlets. The regiment of Horse Guards have a similar uniform, but their tunics are blue with red facings and red horsehair plumes. The undress uniform consists of short jackets of the same colour as the full dress tunic, blue riding-breeches with broad red stripes, usual riding boots, and round blue caps with red braid.

With the exception of the 6th regiment of dragoon guards, the dragoons and other dragoon guards wear red tunics with variously coloured facings, shoulder straps, and collars, darkblue breeches with broad, yellow stripes, riding boots, and white gauntlets. The 2d regiment of dragoons wear bearskins with white feather plumes, but all other dragoons have metal helmets; those of the dragoon guards are of brass, and of the dragoons of steel with horse hair plumes. The 6th dragoon guards wear blue tunics and breeches, white facings, collars and shoulder straps, and trouser stripes. The difference in the colours is as follows:

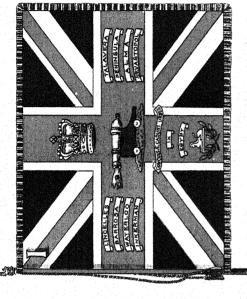
					Facings &c.	Horsehair plumes
ıst	Dragoon C	uards			blue	red
2d	, 27	<b>3</b> 3			lightbrown	black
3d		<b>71</b>			yellow	red and black
4th	<b>3</b> 7	<b>3</b> 7			blue	white
5th	<b>)</b> )	"			darkgreen	red and white
6th	<b>)</b> )	,,			white	white
7th	77	n	 		black	black and white
ıst	Dragoons				blue	black
2d	,		•		blue	white feathertuft
6th		•		•	yellow	white.

With undress and in marching order serge frocks are worn of the same colour as the coat. The field cap is darkblue and of the same shape as that of the infantry. For walking out the men can also wear short jackets and round caps.

The uniform of the hussars is very similar to that of the German hussars, and consists of darkblue tunics with yellow braiding, darkblue breeches with two yellow stripes, fur caps with variously coloured busby bag and hair plumes, white gloves and riding boots. The 3d hussars have red, and the 13th lightbrown collars, and the



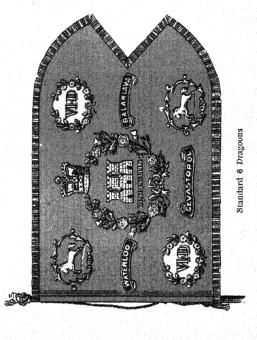
Queen's Colours of the 2, Bat, Grenadier Guards



Regimental Colours of the 1. Bat. cots Guards



Standard Royal Horse Guards



(but is coloured yellowish brown in the field). The havresack is thrown over the right, the waterflask over the left shoulder.

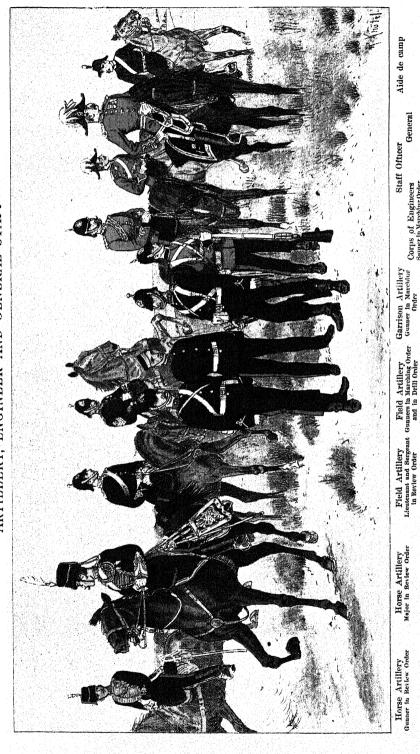
The saddle consists of a tree with front and rear arch of steel, wooden bars and leather seat. The bars are of three different lengths to fit the back of any horse. On the back of the horse there is first placed a numnah of stout felt, and the woollen blanket is folded over it. On the top of this is placed the saddle buckled with a girth, the ends of which are pushed into a  $\vee$  shaped piece of leather fixed to the tree. There are attached to the front arch two saddles bags, and to the back ends of the bars there are straps fixed for articles of equipment. The stirrup leathers are also fixed to the bars.

At the left on the rear arch the sword is fixed, on the right the carbine in a case. In the saddle bags the soldier carries a flannel shirt, a pair of drawers, a towel, a cap, a housewife, knife, fork and spoon, paybook and emergency ration. The cloak and a pair of laceboots are buckled on over the saddle bags. Strapped up in a water proof sheet and buckled on behind the saddle are a pair of riding breeches, a pair of puttees, and a short water proof sheet rolled up; beneath a hay net and a nose-bag; the cooking gear is fixed on the right hand side. Two spare shoes, and the picketing ropes for the horses are carried right and left of the saddle. This is the arrangement for marching order; in times of peace it is somewhat different, and a shabraque of black (for the second Life Guards white) sheepskin is put on.

All the cavalry are armed with sabres and carbines; some carry revolvers instead of carabines; these are: the sergeant major of the regiment, the staff sergeants, the squadron sergeant majors, quartermaster sergeants and farriers, the trumpeters and drivers. The regiments of lancers, and the men in the first ranks of the dragoons carry in addition lances with small red and white pennons.

STANDARDS are carried only by the cavalry of the guards, the dragoon guards, and the dragoon regiments. They are of crimson silk, and on them are emblazoned the names of battles, the crest, and the designation of the regiment. The standards of the guards and dragoon guards are rectangular, those of the dragoons are rounded off, and scalloped on the edge remote from the staff. They are carried by non-commissioned officers.

# ARTILLERY, ENGINEER AND GENERAL STAFF



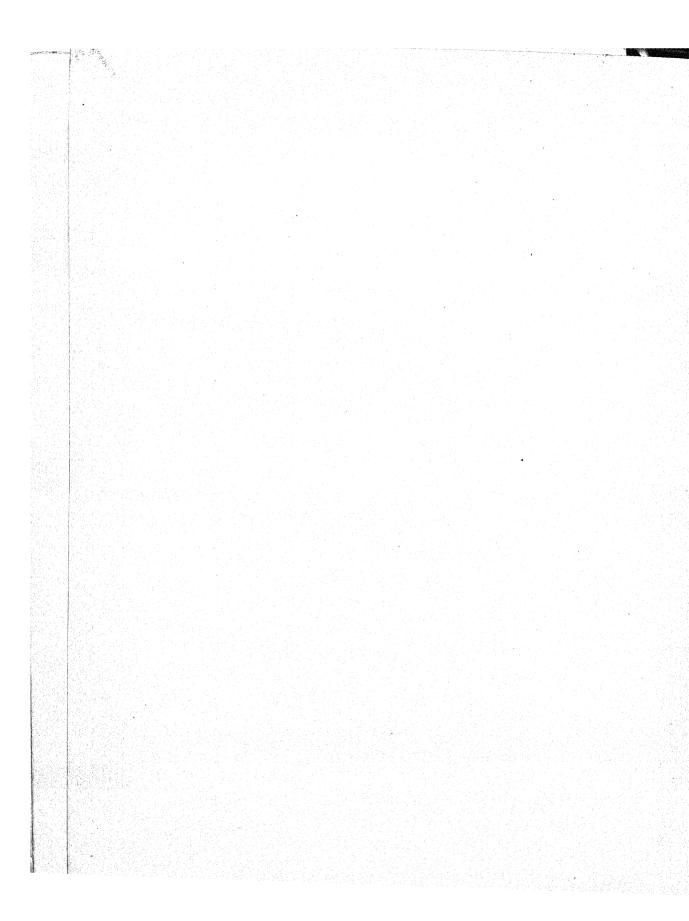
Aide de camp

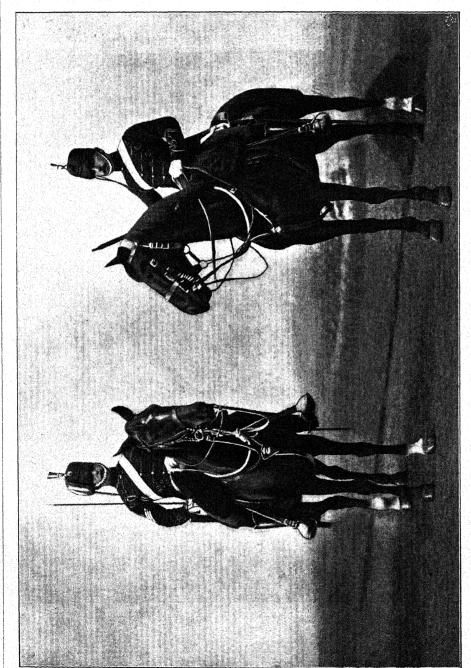
Corps of Engineers Super in Marching Order Officer in Review Order

Field Artillery Field Artillery Lieutenant and Sergeant Gunners in Marching Order in Review Order and in Drill Order

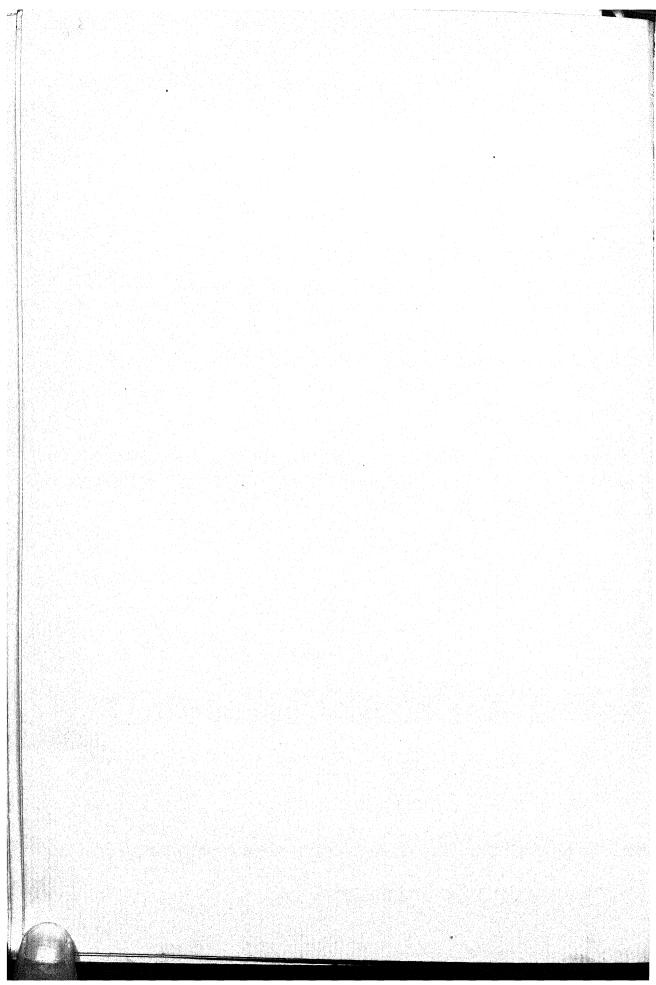
Horse Artillery Major in Beview Order

Horse Artillery Gunner in Review Order





Hussars (Sergeant and Private in Marching Order)



# IN WAR.

On the war footing a regiment of cavalry consists of 3 squadrons and comprises:

	Men	Horses
Lieutenant-Colonel being Commander of the Regiment	1	3
Majors	4	I 2
Captains	3	9
Lieutenants or Second Lieutenants	13	39
Adjutant	I	3
Quartermaster	1	I
Total of Officers	23	67
Sergeant Major of the Regiment (warrant officer)	I	I
Quartermaster Sergeant	I	I
Armourer Sergeant	r	
Sergeant Saddlstore maker	I	ľ
Farrier Quartermaster Sergeant	1	ľ
Sergeant saddler	I	I
Sergeant trumpeter	· I	I
Orderly room Sergeant	. 1	ľ
Orderly room clerk	r	I
Transport Sergeant	1	1
Squadron Sergeant majors	3	3
Squadron Quartermaster Sergeants	3	3
Farrier Sergeants	3	3
Sergeants	28	24
Total of Sergeants	42	41
Corporals	24	24
Trumpeters	6	6
Farriers (Corporals)	3	3
Shoeing Smiths	9	9
Saddlers	3	3
Privates	378	331
Privates acting as drivers, wagonmen and cooks	40	48
Total of Men from Corporals downwards	463	424
Total of Mon Corporats downwards	403	424
Additional Officers:		
Surgeon	I	2
Veterinary Surgeons	1	2
Total of Additional Officers	2	4
Grand Total of Officers and Men	531	536

The Regimental Transport is commanded by one of the lieutenants, assisted by a sergeant; it consists of:

Baggage of
Regimental
Staff

Baggage for
Squadrons

I machine gun and carriage with 2 horses,
2 two-wheeled cart for baggage and supplies with 2 horses each,
4 four-wheeled wagons for stores and ammunition with 4 horses each,
1 two-wheeled cart with medical stores with 2 horses.

3 four-wheeled wagons for baggage with 4 horses to each,
3 " " provisions " 4 " " "
3 pack horses for intrenching tools.

In all 14 vehicles with 23 drivers, 48 draught horses, and 3 sumpter horses.

The regiment comprises a mounted force of combatants consisting of 6 officers and 134 men in each squadron. In all there are 467 men armed with carbines, who carry each 30 cartridges. In the regimental reserve there are 25 boxes of cartridges, each containing 1100 cartridges, which allows for 17,600 rounds for the machine gun and 21 for each carbine. A man armed with a revolver carries 12 cartridges and 24 more for each revolver are carried in the ammunition carts.

Of pioneers there are in a cavalry regiment 3 non-commissioned officers, and 6 privates, who on special occasions are put under the command of an officer, trained in pioneer duties. These men carry in all 6 pickaxes, 6 spades, 3 small axes, 3 saws, and 25 lbs. of guncotton; these articles may, however, also be carried on pack animals. The ammunition carts carry in addition 40 shovels, 20 pickaxes, 16 large axes, 32 bill hooks, 100 lbs. of gun-cotton, and 4 crowbars. 3 crowbars and 33 sickles are stowed away in the squadron wagons.

# THE CAVALRY RIDING-SCHOOL.

The cavalry riding-school at Canterbury trains riding masters, and rough riders for the army. For this purpose there are selected from the cavalry regiments sergeants for riding-masters, and privates for rough riders. The teaching *personnel* consists of I riding master, I quartermaster, and 3 sergeants.

# c. Field Artillery.

### IN PEACE-TIME.

Unlike the cavalry and the infantry the field-artillery is not divided into guards and troops of the line, but together with the garrison artillery it forms the so-called ROYAL REGIMENT OF ARTILLERY, and is regarded as the favoured arm of the forces; indeed the ROYAL HORSE ARTILLERY take precedence of all other troops, and on parade occupy the right of the whole line, and are always the first to march

past. Corresponding to their exceptional position they are recruited by picked men and horses, and wear an especially brilliant uniform. The field artillery is divided into:

- 21 Horse batteries (numbered consecutively A to U),
- I Depôt of horse artillery,
- 103 Field batteries (numbered 1 to 103), including 3 of howitzers,
  - I Depôt of field artillery,
  - 10 Mountain batteries (numbered I to 10),
  - 1 Artillery riding school,
  - 19 Cadres for ammunition columns and parks.

A permanent organisation of these sections does not exist, and the batteries change their garrisons independently of each other. Every two or three batteries, that are in garrison together, are commanded as a complete section by a Lieutenant Colonel, to whom an officer of one of the batteries acts as adjutant. According to the estimates there are in the United Kingdom 4 Lieutenant-Colonels of horse, and 20 of field-artillery; in India there are 5 of horse—11 of field—and 3 of mountain artillery. In every depôt a captain does duty as adjutant, who has charge of the distribution of the recruits, and the control of the reserve men of this arm. The following staffs are distributed over the larger garrisons of field artillery:

	Horse A	Artillery	Field Artillery		
	Unit. Kingd.	India	Unit. Kingd.	India	
Adjutants	I	3		I	
Riding Masters		3	6	4	
Quarter Master	2	_	I	_	
Total of Officers	; 6	6	7	5	
Sergeant Major (Warrant Officer)	) 2	2	2	3	
Quartermaster Sergeant	3		I		
Farrier Quartermaster Sergeants.	. 1	<u> </u>	_		
Sergeant instructor of gunnery .			1		
Sergeant wheeler	. 1			-	
" saddler	Ï			-	
Orderly room sergeant	. I	<u> </u>	4		
Sergeant instructor in Musketry		_			
Sergeant trumpeters	. 2	I	2	4	
Sergeant Cook	. I		5		
Orderly room clerks		3	20	10	
Total of Men	13	4	32	14	
Saddle horses	. 10		10		

<sup>1 10</sup> of those are not yet raised.

The batteries have different establishments according as they are placed within the United Kingdom on the higher or lower establishment, or in India, or in the Colonies, viz:

	Horse Batteries		F	Field Batteries			Mountain Bat- teries			
	Estab				Establish- 5				teries	
		1111		-	iciii			United Kingdom	ies	
	Higher	Lower	India	Higher	Lower	South	India	United	Colonies	India
Number of batteries on		1								In,
each establishment	5	5	II	14	44	3	42	I	I	8
Major	I	1	1	1	1	I	1	I	1	Ι
Captain	1	1	I	1	1	τ	1	I	I	1
Lieutenants	3	3	3	3	3	3	3	3	3	3
Total of Officers	5	5	5	5	5	5	5	5	5	5
Battery Sergeant Major	I	I	I	I	I	ī	ī	Ι	I	I
Quarter Master Sergeant .	r	I	ı	I	I	I	1	I	1	I
Sergeants	. 6	6	6	6	6	6	6	8	6	6
Farrier Sergeant	I	I	I	I	1	I	I	I	1	I
Total of Sergeants	9	9	9	9	9	9	9	II 1	9	9
Trumpeters	. 2	2	2	2	2	2	2	2	2	2
Corporals	5	6	6	5	5	6	6	7	6	6
Bombardiers	5	6	6	5	5	6	6	7	6	6
Saddlers	2	2,	I	2	2	2	1	3	3	1
Wheelwrights	. I	I	1	Ι	I	1	Ι	3	3	
Farriers	• 3	3	2	3	2	4	2	3	3	_
Gunners	. 70	65	76	70	56	76	76	195	147	82
Drivers	65	58	54	64	54	64	54		2	3
Total of Men	153	143	148	152	127	161	148	220	170	97
Saddle horses	. 56	41	65	20	20	28	22	I 2	18	6
Draught and packhorses	. 48	49	88	66	38	110	88	38	112	138
Total of Horses	104	90	153	86	58	138	110	50	130	144
Guns horsed	. 6	4	6	6	4	6	6	4	6	6
Ammunition carts horsed	. —	4	6	6	1	6	6	_		_

<sup>&</sup>lt;sup>1</sup> As this battery serves also as depôt for the batteries stationed abroad it comprises in addition: <sup>1</sup> Regimental Quarter Master Sergeant, <sup>1</sup> orderly room Sergeant, <sup>1</sup> Sergeant Trumpeter, and <sup>1</sup> Sergeant Cook, in all <sup>15</sup> Sergeants.

Of the 14 higher establishment field batteries one in Egypt has I corporal, I bombardier, and 52 horses additional, and of the 44 on the lower establishment the 3 howitzer batteries have each I corporal and I bombardier additional.

The recruits are trained for 8 weeks in the depôts, and are then transferred to the batteries. Their cadres of non-commissioned officers

<sup>&</sup>lt;sup>2</sup> One battery has 192 native drivers and artificers.

<sup>&</sup>lt;sup>3</sup> This battery has an indeterminate number of native drivers.

are more numerous than those of the batteries, but in other respects they have the same organisation. The depôt of the horse artillery comprises 160 gunners, and 140 drivers, and of the field artillery 560 gunners, and 382 drivers. The whole strength of the depòts amounts to:

Horse Artillery: 8 officers, 20 sergeants, 336 men and 200 horses, Field ,, 18 ,, 55 ,, 1024 ,, ,, 230 ,, Both are garrisoned in Woolwich.

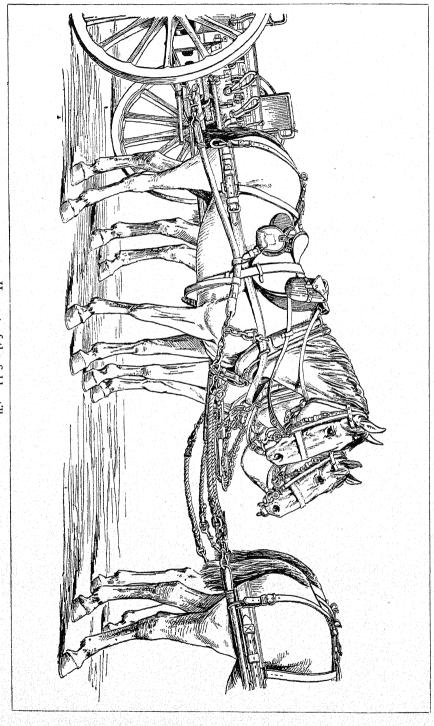
The Artillery Riding School at Woolwich trains rough riders and riding masters for the whole of the field artillery, it supplies horses for the riding lessons of all the cadets of the Woolwich academy, and enforces the adherence of the whole to the regulation riding-system. Its *personnel* consists of 6 officers, I warrant officer, 8 staff-sergeants and sergeants, 101 men with 77 horses, and is included in the field artillery.

Each of the 16 cadres of the ammunition columns consists of I warrant officer (sergeant) and 6 gunners, whose business it is to look after the material of the columns in the artillery depôts, and each of the 3 cadres for ammunition packs has I warrant officer, I sergeant, and I2 gunners.

The batteries of horse and field artillery on duty, within the limits of the United Kingdom are relieved once every 12—15 years, but the mountain-batteries are only employed in India or in the colonies, and the men are relieved every 8 years.

A battery is commanded by a major, supported by the captain of the battery. It is divided into 2 or 3 sections, each commanded by a lieutenant, and consisting of a detachment of two guns. In addition to the guns and ammunition carts with their teams every battery has in times of peace a baggage-cart with its team. The arm of the field artillery is the 15 pdr. breech-loader, of the horse artillery the 12 pdr. breech-loader, and of the mountain artillery the  $2\frac{1}{2}$  inch muzzle-loader screw gun for mountain warfare.

The uniform of the horse artillery consists of a short darkblue jacket with red collar, and very rich yellow braiding on the breast, back, collar, and facings, darkblue riding breeches with broad red stripes, and fur busbies with red bags and white horse-hair plumes; also riding boots with jackspurs and white gloves. The undress uniform consists of a darkblue field service cap with scarlet top, a darkblue frock with red collar and shoulder chains, long trousers with



Harness of the field artillery.

red stripes, and boots with box spurs. The sword belt is of white leather and is buckled on under the jacket. Bandoleers are not worn. The sergeants have braidings of gold lace, and the officers are more richly braided, and their leather accoutrements are black and adorned with gold lace.

The men of the field-batteries wear darkblue tunics with red collar, and yellow braiding on collar and sleeves, cork helmets covered with darkblue cloth, adorned with the Royal arms in front, and a yellow metal ball. In marching order and in undress uniform a darkblue serge frock with red collar and the battery-number on the shoulder-strap is worn instead of the regulation tunic. Cap, riding breeches, boots, overalls, and leather accourrements are the same as for the horse-artillery, but the gunners wear lace-boots with short gaiters. The sword belt is worn over the coat.

The men of the mountain artillery have the same uniform as the dismounted men of the field-artillery, but their serge frocks have a looser cut, and their gaiters and lace-boots are of brown leather.

The cloaks of the artillery are darkblue.

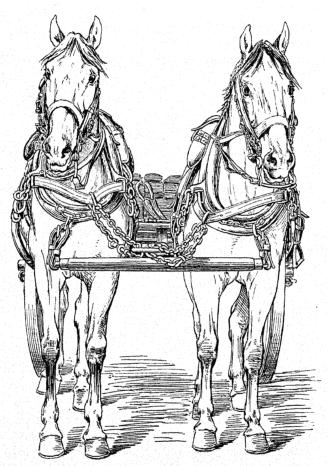
In India and all the colonies the men of all the batteries wear white cork helmets adorned with a ball.

In peace the men's effects are in marching order packed in boxes, but in war the saddlebags &c. of mounted men are packed similarly to those of the cavalry, and the accourrements of the dismounted men are packed in waterproof sheets, and stowed away in the carts.

With the exception of the drivers all the mounted men wear the cavalry sword, which is fixed to the saddle. The drivers are armed with revolvers only, and the gunners of field batteries with sword bayonets. On the forepart of every gun carriage two carbines are fixed for guard duties, in all 12 for each battery. The men of the mountain artillery, who are not mounted, are armed with cutlasses similar to those used in the navy.

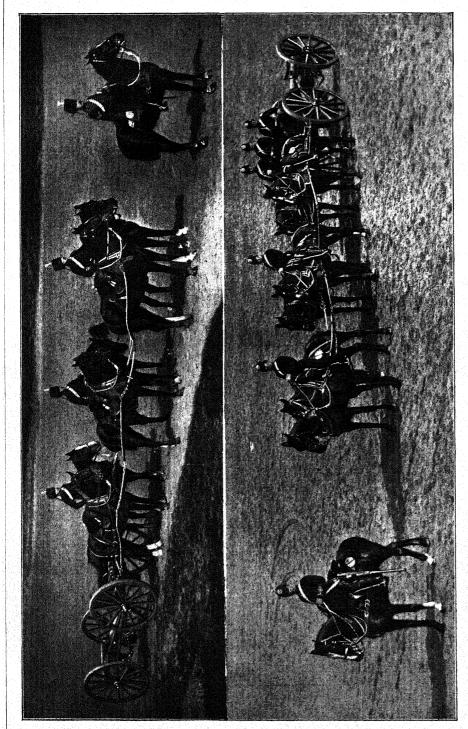
All the horses of a battery are of the same colour as far as possible. The officers of field artillery are supplied with horses by government, and majors are in addition entitled to the regulation forage allowance for one horse of their own as well. Officers of horse artillery, as well as those of field artillery on duty in India have horses of their own, which are not included in the numbers of the establishment.

The harness of the field artillery is the same for all the draught horses; it consists of reins with curb-bits and check-rings, collar with traces, saddle and breechings. Connecting ropes are used for lengthening the traces of the leaders or of the centre-team. The traces of the leaders and of the centre-team are joined to each other and to those of the wheelers by chains, thus forming an unbroken line of

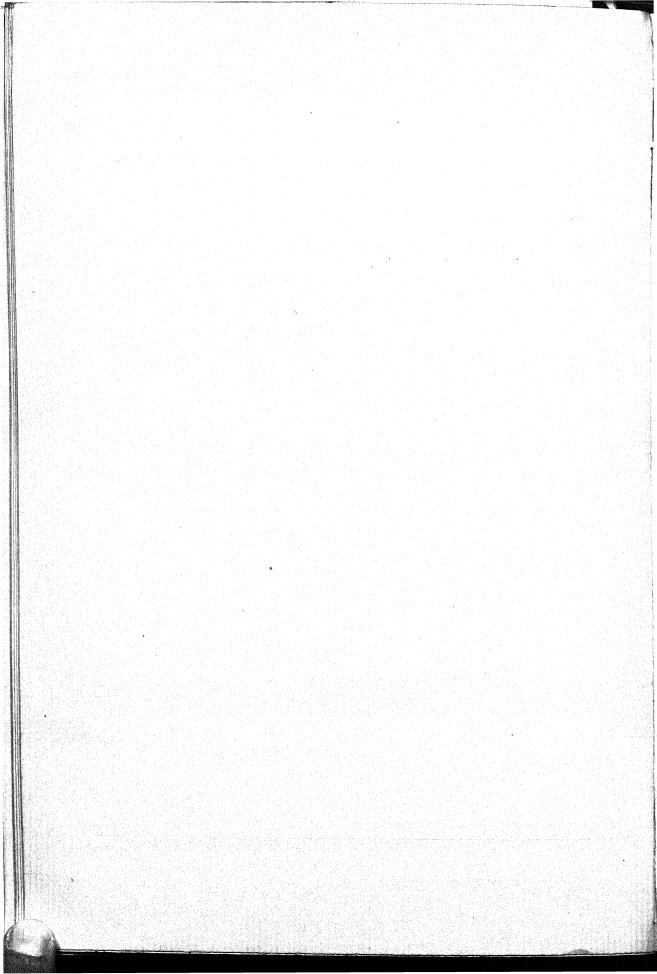


Harness of the field artillery (Wheelers).

pull from the hook of the collar of the leader to the rear trace bar of the gun carriage. The extremity of the shaft is supported by a cross-beam fixed in rings on the lower part of the collar-springs. The breechings pass round the whole body of the horse and are fixed to the pole chains of the shaft. The saddle gear of the riding horses is similar to that used in the cavalry.



1. Horse Artillery in Marching Order 2. Field Artillery in Marching Order



## IN WAR.

In war the field artillery is formed in brigade divisions, the horse artillery brigade division consisting of 2, the field artillery of 3 batteries. A brigade division of field artillery is added to each Division of infantry; the corps artillery of an army corps consists of a staff, I brigade division of horse artillery, and 2 of field artillery. To every independent brigade of cavalry is added a battery of horse artillery.

The staff of the corps artillery consists of I colonel, I adjutant, I orderly room sergeant, 4 gunners (servants and grooms), and I driver with 5 saddle horses and 2 draught horses, and a baggage cart. The staff of a brigade division consists of I lieutenant-colonel, I adjutant, I surgeon, I veterinary surgeon, I sergeant major, I sergeant trumpeter, 2 clerks, 6<sup>1</sup> gunners (servants), and 3 drivers with I2 saddlehorses for a brigade division of horse artillery, and 8 ditto for a brigade division of field artillery, and in each 8 draught horses.

The batteries on a war footing are as follows:

Artillery Field Horse horses men horses 3 Captain . . . . . . . . . 2 Lieutenants . . . . . . . 6 3 3 Total of Officers 6 11 5 Battery Sergeant Major . . 1 1 1 Quartermaster sergeant . . 1 Farrier sergeant . . . . . 1 1 6 Sergeants . . . . . . . . . . 6 6 Total of Sergeants Buglers . . . . . . . . . . . . 2 2 2 2 Corporals . . . . . . . . . . . 6 6 Bombardiers . . . . . . 6 6 1 3 Saddlers . . . . . . . Wheelers . . . . 2 Gunners 76 42 Drivers 194 194 59 113 Spare horses 118 Total of Men 165 171 116 1.57

<sup>&</sup>lt;sup>1</sup> 8 in horse artillery.

A battery of horse artillery comprises in all: 11 horses, which are the private property of officers, 74 saddle horses (6 being supernumerary), and 106 draught horses (of which 12 are supernumerary); a battery of field artillery comprises: 1 horse, the private property of the major, 28 saddle horses (5 being supernumerary), and 102 draught horses (of which 8 are supernumerary). Range finders and ground scouts are generally mounted on the supernumerary horses.

A Howitzer battery would have the same strength as a field battery but with 9 bombardiers, 85 gunners, 71 drivers, 32 riding, and 104 draught horses.

Every battery has 6 guns, 6 ammunition wagons, I field smithy (all drawn by 6 horses), 2 wagons for baggage and supplies drawn by 6 horses, and I wagon containing articles of equipment drawn by 4 horses; 16 vehicles in all.

The guns of the horse artillery are 12 pounders, those of the field artillery are 15 pounders, breechloaders (see Section II, Chapter I). Every battery carries the following ammunition:

		Horse	Field
		Batteri	es
For each gun	∫ Shrapnel	. 134	142
For each guil	Case	. 8	8

Every battery carries 12 pickaxes, 24 spades, 12 large axes, and 6 saws.

The Ammunition Columns are divided into two classes. Those of the first comprise one ammunition column for every Division of cavalry or infantry, as well as one for the corps artillery or other corps troops of the army corps. They are commanded by the Chief of the artillery (C. R. A.) of the Division, or of the corps artillery, as the case may be, and bring up the ammunition reserves for all arms of the whole body of troops. Every column consists of a number of battery ammunition wagons, which feed the batteries, of small arm ammunition carts to render the same service to the infantry, and of reserve-carts with ammunition to supply in their turn the ammunition-wagons, and small arm ammunition carts of the whole column.

The columns of the second class in every army corps are combined into an ammunition park, which consists of 3 sections, and is calculated for the supply of an army corps and 2 cavalry brigades. These sections consist exclusively of reserve wagons with ammunition to feed the ammunition-columns.



The strengths of ammunition columns &c. are as follows:-

		u + .		Of the	Of the Ammun. I		
	Column of Infantry Division	Ammunition Column of the Corps	Column of Cavalry Brigade	1st, 2d or 3d Section	Staff	Total of the Park	
Major	1	1		r			
Captain	1	1	1	I			
Lieutenant	3	3	2	3		******	
Veterinary		I	I				
Total of Officers	5	6	4	5		20	
Warrant Officer (Staff Sergeant)	ı I	I	1	r ·		3	
Battery Sergeant Major	I	I	1	r		3	
Quartermaster Sergeant	1	1	I	I		3	
Farrier Sergeant	I	T	I	I	<u></u>	3	
Sergeants	6	.6	4	- 6	I	19	
Total of Sergeants	9	9	7	9	1	28	
Trumpeters	2	2	2	2		6	
Corporals	6	6	4	6		18	
Bombardiers	9	9	6	6		18	
Farriers	5	5	3	5	-	15	
Collar makers	3	3	2	2		6	
Wheelers	3	3	2	2	·	6	
Gunners	49	58	28	48	7	151	
Drivers	114	152	51	140	1	42 I	
Total of men	191	238	98	211	. 8	641	
Saddle Horses	31	32	25	27	7	88	
Draught "	205	272	80	252	4	760	
Total of horses	236	304	105	279	11	848	
Gun carriages with limber	I	3	I				
Small arm ammunition carts .	I 2	3	7				
Battery-ammunition wagons	9	24	6				
Wagons for artillery ammunition		8	_	20		60	
Wagons for small arm ammunition	11	2	-	14		42	
Wagons for stores, equipment, and provisions, being I for							
each	4	4	3	4	2	14	
Field forge	1	ī	1	ī		3	
Total of vehicles	41	45	18	39	2	119	

The staff of an ammunition-park consists of I Lieutenant-Colonel, I Adjutant, I Adjutant, I surgeon, 2 veterinary surgeons, I clerk, 7 gunners (servants), and I driver; 7 saddle-horses, 4 draught-horses, and 2 baggage carts.

Of projectiles and cartridges the following are the quantities carried:

	of s	jo	Of the	e Am	mun. Park
Column of Infantry Division	Ammunitic Column the Corp	Column o Cavalry Brigade	rst, 2d or 3d Section	Staff	Total of the Park
Cartridges for small arms . 646,800	124,300	123,200	· · ·		1,655,500
Revolver cartridges 7 920	13,200	5 040			6 720
12 lb. Shrapnel —	858	574			1716
12 lb. Case —	44	28	_		84
15 lb. Shrapnel 1 350	2 700	_			6 570
15 lb. Case 64	128	. 11 <del>-</del> 11			360

The distribution of the above ammunition is described in Chapter VIII.

The strength of the mountain batteries in time of war depends on the nature of the theatre of war, and on the manner of their employment. On the north-western frontier of India the strength of a battery in war time is the same as that on the peace-footing given above; but the establishment is increased by about 60 mules for the transport of baggage, provisions &c. The transport of every gun requires 5 mules, viz: I each for the fore-part of the gun, the hind-part of the gun, the gun carriage, the axle, and the wheels; 5 more mules carry pack-saddles, and are intended to relieve the other animals. To every gun there are added 6 mules carrying ammunition, and the whole supply of ammunition for a battery amounts to 144 shells, 36 Shrapnels, 100 grape-shot, and 18 Star Shell.

# d. Garrison-Artillery.

The garrison-artillery together with the field-artillery is part of the Royal Regiment of Artillery, but is a separate <sup>1</sup> arm, and forms 3 great Divisions, each of which furnishes the *personnel* of the garrison artillery for a certain number of fortresses or garrisons. These Divisions are designated as the Eastern, Southern, and Western Divisions, with their Head Quarters respectively at Dover, Portsmouth, and Devonport. Each consists of a staff, a number of companies of garrison-artillery, and two depôt companies.

The depôt companies of the Eastern Division are stationed at Dover and Great Yarmouth, those of the Southern Division at Gosport and Seaforth (near Liverpool), and those of the Western Division at Plymouth and Scarborough.

<sup>&</sup>lt;sup>1</sup> With the officers this separation is not yet fully carried out; see Section III, Chapter I.

Of each Division a certain number of companies are stationed at home, a certain number in the colonies, and the remainder in India, the foreign garrisons being permanently assigned to each division, which periodically relieves its own companies in them.

At present the garrison artillery is being increased, and when it reaches its full strength it will have 40 companies at home, 37 in the colonies, and 27 in India, in all 104 service companies. There are also detachments of garrison artillery at Berehaven, and at the School of Guernsey, at Shoeburyness.

The staffs of the garrison-artillery are located with their respective garrisons, and their officers are: Lieutenant-Colonels, commanding the sections in the forts; majors and captains in charge of, and responsible for the armament of the works, that are not occupied; captains and lieutenants acting as adjutants, then officers of various ranks doing duty as instructors in gunnery and siege works, and as quartermasters. The inferior staffs consist of warrant officers in charge of armaments in every fortress or group of works (Master Gunners), garrison sergeant-majors or chief clerks, staff sergeants, and armament sergeants, staff clerks, quartermaster sergeants, musketry instructors, sergeant trumpeters, and cooks (sergeants), corporals and gunners doing duty as clerks, curators of the different instruments, care takers, telegraphists and machinists. Finally there also belong to the staffs a small number of sergeant majors, sergeants, corporals, bombardiers, and gunners, mostly married men of long service, who live at the distant forts and batteries without any other garrison, and are charged with keeping them in good condition. These staffs are not relieved, and form the constant nucleus of the personnel of the garrison artillery of the fortresses; most of these men are specialists, who receive special pay for their services. There is a special staff for every garrison or fortress, but it would lead us too far to describe each of them separately. On the whole the Staffs number:

In the United Kingdom and in the Colonies:

Eastern I	Division :	53	Officers,	26	Warrant	Officers,	82	Sergeants,	518	men	
Southern	.,	61	<b>"</b>	30	,,	,,,	116		725	,,	
Western	,,	39	٠,	24		,,	55	.,,	407	,,	
	Total	153	Officers,	80	Warrant	Officers,	293	Sergeants,	1650	men	
In India		20	Officers,	I 2	Warrant	Officers,	56	Sergeants,	42	men	

The companies are of various strength according to the extent of the works to be manned, and are commanded by majors with I or 2 captains, and 2 to 4 subalterns according to the strength. The following are the establishments of the companies in the various garrisons:—

Officers Sergeants Trumpeters Rank and file

In the United Kingdom (excepting				
as below)	5	9	2	145
In Scotland		9	2	110
In Jersey	5	8	2	124
In Egypt	5	8	2	140
In Sierra Leone	4	6	2	92
In Gibraltar	7	13	3	198
In Ceylon, Mauritius or Straits settle-				
ments	6	9	2	139
In Hong Kong, Bermuda, Jamaica				
or St. Helena	7	13	3	184
In Malta	7	13	3	200
In Nova Scotia	7	13	3	209
In St. Lucia and Barbados	7	13	3	165
In Cape Town	6	9	2	129

Of the 27 companies stationed in India 23 are garrison artillery (with 5 officers, 6 sergeants, 2 trumpeters, 5 corporals, 5 bombardiers, and 122 gunners), the other 4 are position batteries (having each 5 officers, 9 sergeants, 2 trumpeters, 6 corporals, 6 bombardiers and 72 gunners). These latter batteries consist each of 4 40 pdr. guns and 2 6.3 inch howitzers, each of which is drawn by 2 elephants. The ammunition wagons, 12 in number, are drawn each by 8 oxen. Of the companies serving in the United Kingdom also, 4 are trained for siege artillery, or artillery of position, but they are not supplied with horses in times of peace.

Every depôt consists of 6 officers (I Lieutenant-Colonel, I Major, I Captain, 3 Lieutenants or Second Lieutenants), 12 Staff sergeants and sergeants, 2 trumpeters, 6 corporals, 5 bombardiers, and 117 gunners besides a number of clerks with the garrison staff of the Division.

The companies relieve each other within the respective districts of their several Divisions. Usually a company remains 3 to 5 years in its garrison, and after 12 to 15 years it returns to the United Kingdom.

Finally there also belong to the garrison artillery the detachment of the school of gunnery at Shoeburyness comprising I officer, 9 sergeants, 2 trumpeters, and 128 men with 42 horses; a detachment at Berehaven of I officer, 3 sergeants, I trumpeter, and 27 men,

as well as a general depôt at Woolwich for all those that are in garrison, and invalids, &c., comprising 22 officers, 2 warrant officers, 67 staff sergeants and sergeants, and 400 men. The total strength of the garrison artillery at home and in the colonies is 706 officers, 83 warrant officers, 1296 sergeants, 196 trumpeters, 15,250 men, and 103 horses; in India 155 officers, 12 warrant officers, 230 sergeants, 54 trumpeters, and 3414 men.

The uniform of the garrison artillery is precisely similar to that of the dismounted men of the field artillery. On the shoulder-straps are seen the initial letters of the name of the Division, and the number of the company. The leather belts are white. The equipment is similar to that of the infantry. Their arms are Martini-Medford carbines and bayonets.

About the War formation of the garrison artillery nothing has as yet been published.

# e. Engineers.

# IN PEACE-TIME.

The corps of engineer officers, and the several institutions and bodies of troops of engineers constitute the Corps of Royal Engineers, at the head of which stands the INSPECTOR GENERAL OF FORTIFICA-TIONS (see Chapt. VI). In addition to their duties with the armysections of engineers, the officers of engineers have to superintend all the buldings vested in the War Office, as well as erection and maintenance of all military structures and fortification, land survey, the management of military telegraphs and lines of railway, the maintenance of the torpedo defences, of the naval and commercial ports, &c. In every military district there is appointed a superior officer of Engineer acting as "Commanding Royal Engineer" (C. R. E.), who has charge of all the branches of his arm, and is in command of all the sections of engineering troops on duty in his district. Under him Junior officers of engineers superintend the different works in the "Sub-districts of Engineers"; to these and to the Engineer in Command are subordinated a number of officers of engineers, of warrant officers and men, as well as civilian topographers, draughtsmen, clerks, inspectors, and workmen.

The corps of engineer officers consists of 88 Lieutenant-Colonels, 166 majors, 231 captains, and 420 lieutenants and sub-lieutenants; in all 905 officers, 385 of whom are employed in India, and the rest

in the United Kingdom and in the colonies. The executive duties with the regimental establishments of the Royal Engineers are filled by officers drawn from this corps. There are also appointed with the "Coast-Battalions" 7 captains and 7 lieutenants, and with the several branches of the service 31 quartermasters, and 1 riding master all being officers, who have been drawn from the corps of non-commissioned officers. These latter, as well as the regimental estalishments of the Corps are in peace-time employed in the United Kingdom and in the colonies only.

The regimental establishments of the corps of engineers comprise the following sections:

- 1 Bridging-battalion,
- 1 Telegraph battalion,
- 1 Mounted Detachment Field Depôt,
- 2 Field parks with a Training depôt,
- I Balloon section,
- 8 Field companies (Nos. 7, 11, 12, 17, 23, 26, 37, 38),
- 18 Fortress companies (Nos. 1, 2, 3, 5, 6, 9, 15, 18, 20, 24, 25, 29, 31, 32, 36, 41, 42, and 43),
- 2 Railway companies (Nos. 8 and 10),
- 12 Submarine Mining companies (Nos. 4, 21, 22, 27, 28, 30, 33, 34, 35, 39, 40, and M),
  - r Coast battalion,
- 4 Survey companies (Nos. 13, 14, 16, and 19),
- 8 Depôt companies (A to G, and N).

The pontoon-battalion is stationed at Aldershot, and consists of two companies comprising in all II staff-sergeants and sergeants, 2 trumpeters, 18 corporals and second corporals, 2 artificers, 101 sappers, and 58 drivers with 64 saddlehorses and draught-horses. This is commanded by a Lieutenant-Colonel, who has 6 officers of engineers under him.

The Telegraph-battalion consists of 2 sections, of which the 1st is stationed at Aldershot, and is trained exclusively for telegraph-service in the field. It comprises 16 staff-sergeants and sergeants, 3 trumpeters, 18 corporals and second corporals, 4 artificers, 77 sappers, and 55 drivers with 65 horses. The 2d section consists of men employed in the telegraphic service of the country, and are in charge of an extensive telegraphic district in the south of England. This section comprises I warrant officer, II staff sergeants and sergeants, 21 corporals and second corporals, and 132 sappers, who are relieved by men of the 1st section, so as to give a through training in prac-

tical telegraph service to as large a number of men as possible. In case of mobilisation the two sections are combined to form the field telegraph sections. The telegraph battalion is in charge of 10 to 12 officers.

The two field parks consists in peace-time of cadres only, and comprise in all 3 sergeants, 4 corporals and second corporals, 6 sappers, and 20 drivers with 21 horses.

The field depôt comprises I warrant officer, 13 staffsergeants and sergeants, 8 corporals and second corporals, 23 sappers, and 70 drivers with 33 horses. This depôt trains drivers for the field companies, and looks after the maintenance of the material required for the new formations to be created in case of mobilisation. It is quartered at Aldershot.

The Mounted Detachment consists of 3 sergeants, 2 corporals, 2 second corporals, 48 sappers, and 15 drivers with 20 saddle-horses, and 30 draught-horses. It is permanently quartered at Aldershot, and is commanded by two officers.

The Balloon section at Aldershot, to which is added a school of aërial navigation, is composed of 6 staff-sergeants and sergeants, 1 bugler, 7 corporals and second corporals, and 26 sappers; it is commanded by 2 officers.

Of the 8 field companies 4 are on the higher, and 4 on the lower establishment. Of the 1st four, 2 are at Aldershot, I at Chatham, and I at the Curragh Camp; of the 2d four, 2 are at Aldershot, and I in each of the camps at Shorncliffe, and the Curragh. Those on the higher establishment consist each of 3 officers, 8 staff-sergeants and sergeants, 2 trumpeters, I4 corporals and second corporals, I artificer, I34 sappers, and 23 drivers with 26 horses; those on the lower establishment have each 3 officers, 5 staff-sergeants and sergeants, 2 trumpeters, I artificer, I0 corporals and second corporals, 58 sappers, and I9 drivers with 21 horses.

One Railway Company is engaged on the lines of the Royal Arsenal at Woolwich, the other on the military railway Upnor-Chattendon near Chatham. The two companies together consist of 4 officers, 12 staff-sergeants and sergeants, 4 buglers, 28 corporals and second corporals, and 86 sappers; they are in fact only cadres for formations in war-time.

Of the 12 submarine mining companies three (Nos. 4, 30 and M) are in Portsmouth, Plymouth, and Chatham; they are the so-called "Central-companies." They train the recruits for their branch of the

service, and furnish men (88 in number) for the manipulation of the electric search-lights in all the naval ports. Their establishments number altogether 510 men counting from the warrant officer downwards. The other 9 companies are distributed in the different fortified naval ports, and have special establishments according to the extent of the district to be defended, varying from 44 to 65 men of the rank of sergeant major and downwards. Each establishment is managed by 3 officers.

The Coast battalion, which is organized in 11 sections, and consists of 14 officers and 190 men of the rank of warrant officer and downwards is located in small bodies in those ports, which are only provided with militia and volunteer submarine mining sections as preparation for war. The *personnel* of this battalion looks after the maintenance of the material for torpedoes and sea-mines, and serves in a measure as a nucleus for the establishments of the Auxiliary forces.

The 4 Survey companies comprise 24 officers and 454 men of the rank of warrant officer and downwards.

The fortress companies consist each of 3 officers, 6 staff-sergeants and sergeants, 2 buglers, 12 corporals and second corporals, and 72 to 73 sappers.

The Depôt Battalion of Royal Engineers consists of 8 companies, and numbers 20 officers, 5 warrant officers, 70 sergeants, 20 buglers, 105 corporals and second corporals, and 618 sappers. It is garrisoned in Chatham, and trains recruits for the sappers for the fortress and survey companies.

In addition to these there are employed of the rank of warrant officer, and downwards the following:

In the military telegraphs and telephones	45	men
other training institutions	84	,,
In the staffs of engineers of the military districts:		
As inspectors and clerks	360	71
As mechanics	158	,,
And in the war-office and record office	43	14.5

The uniform of the engineers consists of red tunics (serge frocks in undress or in marching order) with collars and facings of blue velvet (cloth on the serge frock), and yellow braidings on collar and facings; darkblue trousers with broad, red stripes, infantry helmets, and in undress round, blue caps with yellow band. The leather ac-

coutrements are white. The equipment of the mounted men is similar to that of the mounted field artillery men; that of the dismounted men is similar to that of the infantry. The cloaks are darkblue.

The mounted non-commissioned officers and trumpeters are armed with sabres and revolvers, the drivers with revolvers, the mounted men of the telegraph sections as well as the mounted detachments of pioneers are armed with carbines; the dismounted men of these troops are provided with carbines and sword bayonets, and the dismounted men of all other formations with infantry muskets and bayonets.

# IN WAR.

In war there is added to every Division of infantry a field company of engineers; to every Division of cavalry, if such be formed, a mounted detachment; to every army corps as Corps Engineers a field company, a pontoon company, a staff and 4 sections of the telegraph battalion, a field park, a railway company, and lastly a balloon section. The strengths of these Units are as follows:

	Field Com- pany	Mounted Detachment	Pontoon Company	Staff and 4 sections of the Telegr. Batt.	Balloon-Sect.	Field Park	Railway. Company
Major	I	1		I		******	I
Captain	1	1	1	1	I		I
Lieutenants	4	2	2	4	2	I	3
Total of officers	6	4	3	6	3	1	5
Sergeant Major	1	ī	Ι	I	1		I
Quartermaster Sergeant	I	1	· I ·	2	-	-	I
Sergeants	6	5	6	9	2	I	4
Total of Staff Sergeants and Sergeants	8	7	8	12	3	1	6
Artisans of all classes	I	2	3	5	I	2	****
Trumpeters and Buglers	2	3	2	4	I		2
Corporals	7	4	8	9	3	I	8
Second Corporals	7	4	8	8	3	I	8
Acting "	12	5	- 6	16	4	2	6
Sappers and Batmen	137	74	72	93	20	10	122
Drivers and Wagonmen	31	24	101	91	16	27	1
Total of Men	197	116	200	226	48	43	147
Saddle-horses	19	54	21	43	10	5	10
Draught-horses	39	42	163	126	32	44	2
Pack-horses	5	6					
Total of Horses	63	102	184	169	42	49	12
Vehicles	11	12	28	30	8	11	I
			용 (1) 1 (1)				

The staff of the pioneer corps consists of I Lieutenant-Colonel, I captain or lieutenant acting as adjutant, I staff-sergeant clerk, and 5 sappers or drivers with 4 saddle horses and 2 draught horses, and a luggage cart. The engineer staff of each division consists of I field officer, I captain or subaltern, I sergeant clerk, and 4 sappers as batmen.

To a pontoon company there are also added I surgeon and I veterinary surgeon, and to each field company I surgeon who are all provided with a horse each.

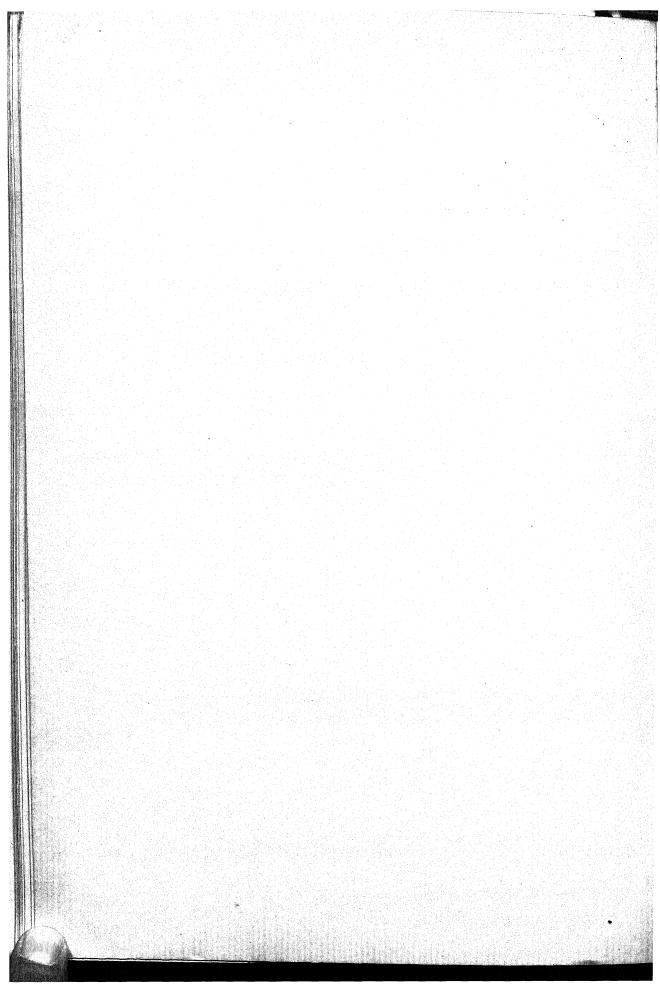
The train of a company of field pioneers consists of 4 intrenching tool carts (2-horsed), I cart for medical equipment (I-horse), I field smithy, and 2 pontoon wagons with 4 horses to each, 2 carts for stores and baggage, and I cart for provisions, each of which is drawn by 2 horses. Intrenching tools are carried by 5 packhorses. The company carries with it on carts and packhorses the following intrenching tools; III shovels, 7I pickaxes, 9 spades, 39 large, and 26 small axes, 43 bill hooks, 20 saws, 420 lbs. of gun-cotton, 1000 sandbags, and IO crow bars. With the trestles, the pontoon and the material belonging to it, the company can construct a light bridge for infantry 75 feet long, or one of 45 feet for all arms.

The Mounted Detachment carries with it on 6 carts, each drawn by 2 horses, baggage, provisions, and forage; and on 6 carts, each drawn by 4 horses, intrenching tools and technical equipment. The latter together with 6 packhorses bring up 12 shovels, 18 pickaxes, 30 spades, 18 large and 6 small axes, 24 bill hooks, 15 saws, 436 lbs. of gun-cotton, 600 sandbags, and 6 crow bars.

A Pontoon Company has 20 six-horsed wagons; of these 16 have 1 pontoon each, and 4 have 4 trestles and other pontoon material; by means of these a bridge 100 yards long can be built, which can be used by all arms. Of other vehicles there are at hand: 2 carts for medical equipment and forage (1 horse each), and 1 field smithy, 2 wagons for equipment, and 3 for baggage, stores, and supplies; all these drawn by 4 horses each.

Each section of a telegraph division is supplied with 20 miles of line, partly air-line (uninsulated), and partly cable. This section is supplied with a two-horse cart for the cable, three 6-horse wagons for air line, two 2-horse carts for supplies, and one 6-horse wagon for technical equipment, besides one 4-horse and one 2-horse baggage carts for the use of the staff.

Ordnance Corps



A Balloon Section carries its apparatus for aërial navigation on one cart, 4 for gas tubes, and one for other equipment, each of which is drawn by four horses; in addition there are 2 carts drawn by two horses each for baggage, provisions, and forage. One cart is fit to receive 2 balloon cars with appurtenances.

A Field park comprises one cart with photographic and lithographic apparatus, one ditto with apparatus for field printing, I field smithy, and 6 carts with intrenching tools. These latter hold 78 shovels, 48 pickaxes, 48 large axes, 48 bill hooks, I6 saws, 660 lbs. of guncotton, 2000 sandbags, I0 crow bars, and I2 reaping hooks. The baggage, provisions, and forage are carried on 2 carts drawn by 2 horses each.

For service on the lines of communication and for siege operations Fortress and Railway companies are mobilised. Of the former each company consists of 4 officers, 6 sergeants, 2 buglers, 18 corporals and lance corporals, 94 sappers, and 8 drivers; of the latter each company consists of 5 officers, 6 sergeants, 2 buglers, 22 corporals and second corporals, 112 sappers, and 11 drivers with 10 saddle horses and 2 draught horses, and in addition a cart, drawn by two horses for technical apparatus. On Service all necessary transport work is directed by the companies on the lines of communication.

Nothing has up to now been published concerning the organisation of the submarine mining companies in war.

# f. The Army Service-Corps.

#### IN PEACE-TIME.

The Army Service-Corps has more varied duties to discharge in the British Army, than falls to the lot of the same corps in the German Army. This corps is placed under the command of the Quartermaster General, and has to attend to all transport as well as to the purchase and issue of provisions, forage, fuel, lights, &c.; also to the maintenance and appointments of barracks, and the care and distribution of the remount horses, that have been purchased. Excepting the staffs of the artillery and engineers, all the other staffs draw their clerks from this corps. In peace-time the Army Service Corps is employed only in the United Kingdom and in the colonies.

Subject to the Quartermaster General in the War Office an Assistant Quartermaster General attends to the special business of the Army Service Corps, and in every district a Staff-Officer of the corps

is in command of all the officers and men of the supply and barrack branches, and also of the companies of the Army Service Corps; the Remount-Companies only are under the officers of the Remount-Department, who in their turn are subject to the Inspector of Remounts.

The Corps of Officers of the Army Service Corps, which is employed in all branches consists of 26 Lieutenant-Colonels, 19 Majors, 71 Captains, 68 Lieutenants, 14 Second Lieutenants, 38 Quartermasters, and 2 Riding Masters, in all of 238 Officers; besides these there are 36 honorary officers, who are employed in the General Staff or elsewhere. Under these 120 warrant officers are employed in different branches of the service.

There are 38 companies of the Army-Service Corps, numbered 1 to 38; of these Nos. 1 and 2 are transport-depôt companies at Aldershot and Woolwich, whose business it is to train the recruits; No. 18, also at Aldershot, is a depôt for the supply-branches, and No. 38 at Aldershot is a supply company. The remaining 34 are transport companies and consist each of

- 1 Captain
- 1 Lieutenant
- 2 Officers
- I Warrant Officer
- 1 Sergeant Major
- I Quarter-Master Sergeant
- 3 Sergeants
- 3 Corporals
- I second Corporal
- 34 Drivers
- 1 Trumpeter
- 1 Farrier Sergeant
- 1 Wheeler
- 1 Collar-maker
- 1 Farrier
- 48 Men
- 12 Saddle horses
- 24 Draught horses
- 36 Horses.

On the transport-service there are engaged, inclusive of the depôts 269 sergeants, 36 trumpeters, and 1840 men of the rank of corporal and downwards and 1311 horses.

The Supply branches, inclusive of the above-named 18 and 38, number 180 sergeants, 1 trumpeter and 756 men.

Two Remount-Companies are in charge of the remount horses when first purchased; one is at Woolwich, the other in Dublin, and are designated by the letters A and B; each consists of I sergeant major, I Quartermaster sergeant, I farrier sergeant, 3 sergeants, 3 corporals, 3 second corporals, 4 artificers, and 49 privates. The men of these companies belong to all arms, and have extended their time of service to 12 years, and have been transferred to the Army Service Corps at their own request.

The Barrack Department numbers 15 staff-sergeants, 296 barrack wardens, and 41 sergeants; the two latter classes consist of non-commissioned officers either pensioned, or in active service, and must have served 18 years at least. It is intended that the first class, viz: the staff-sergeants should gradually be absorbed and replaced by barrack wardens.

Finally the number of Staff-clerks of the corps on the establishment is 211 men of the rank of sergeant-major and lower grades, inclusive of 18 Warrant-Officers.

The Uniform of the Army-Service-Corps consists of dark-blue tunics and serge frocks with white collar and piping, dark-blue trousers, or riding breeches with two white stripes, and helmets, with ball ornament similar to those of the artillery. The cloaks are dark-blue. Mounted men are equipped like the field-artillery, dismounted like the infantry. The leather belts are white; in the field they are stained yellowish brown. Sergeant-majors, sergeants and trumpeters are armed with cavalry sabres and revolvers, other mounted men with the Martini-Metford-Carbine, and all the dismounted men with carbine and bayonet.

#### IN WAR.

In war as in peace the principal duties of the Army Service Corps consists in supply and transport. The Army-Service-Corps is organised in companies, which are independent of each other. They are allotted to the several higher units of the army, with which they have to discharge the duties of the train-service. By way of example there may be described here in detail the organisation of an Army Service Corps company doing duty with a brigade of infantry.

The Staff of such a company comprises: I Captain, as commanding officer of the company, and I subaltern, I warrant officer, I sergeant-

major, I quartermaster sergeant, I sergeant, 5 wheelers (I sergeant and 4 privates), 6 saddlers and 7 farriers, 26 drivers with 2 water carts and 2 general service wagons, 7 saddle-horses and 24 draught horses. The baggage of the company is carried with that of the staff. The artificers undertake all the repairs of the transport material of the brigade, and they shoe all the horses. To the company is also added I veterinary surgeon.

The 2d officer of the company, who usually is also a captain, is the supply officer of the brigade. He collects or receives all the provisions and the forage, superintends their issue to the troops, keeps the accounts, and sees that the depleted stores are refilled. The butchers of the company receive their orders from him, and he supplies them with all necessary instruments. As assistants in the provisioning service, there are subordinated to him: I warrant officer, I staff sergeant, I corporal, and 5 privates; and for the transport service he has I corporal and 6 men with I supply wagon, I water cart, I baggage cart with 2 saddle horses, and 8 draught horses.

A supply column is commanded by a lieutenant. It contains (see Ch. VIII) I field ration, I emergency ration, and I forage ration for the whole brigade. Every day the column distributes its stores (excepting the emergency ration) to the troops of the brigade, and receives others in exchange from the supply column of the 2d line or from a field-magazine. The supply column comprises: 3 sergeants, 4 artificers, I trumpeter, and 34 drivers with I3 baggage and supply waggons, 4 saddle horses, and 52 draught horses; the special section for the emergency ration comprises: I second corporal, and 6 drivers with 3 supply waggons, and I2 draught horses.

A lieutenant is in command of each section of the company, from which are drawn the horses required for the medical detachment and the field hospital. The lieutenant commanding receives orders as to the employment of his horses from the senior medical officer, and he sees that they are duly carried out, but he is in sole charge of the horses, and the drivers receive their orders directly from him. The medical detachment comprises: I sergeant, I corporal, I second corporal, and 32 drivers, 2 saddle horses and 50 draught horses; the field hospital, I sergeant, I corporal, I second corporal, and 17 drivers, 2 saddle horses and 20 draught horses. The vehicles and other horses of these formations belong to the Army Medical corps.

Finally the company supplies for the baggage of the staff of the brigade: I second corporal and 2 drivers.

Accordingly the company of the Army Service Corps added to a brigade of infantry numbers, exclusive of the officers, men, and horses detached to medical formations and the brigade staff:—

4 officers, 2 warrant officers, 114 men, 23 vehicles, and 109 horses, as well as 1 mounted veterinary surgeon.

The companies of die Army Service Corps allotted to the other larger units of troops are similarly organized; here we have only to enumerate their total numerical strength with the same exceptions as above:—

	cers	rrant	· c	nicles	Horses
With a Division of Infantry, for the troops not included in the Infantry-brigades (Divisional-	) U	Wa	Me	Vel	Но
troops)	41	2	91	16	84
With a Cavalry-brigade	4 2	2	118	26	123
With an Army-corps, for the troops not com-					
prized in the Divisions (Corps troops)	41	3	142	88	172

A company organised as a field-bakery-column consists of a staff and 8 sections with 10 ovens to each. The ovens are made of iron and consist of 5 connecting parts, viz: an upper and a lower part with semi-circular cross-section, a bottom and two end pieces. The ovens are packed on hired carriages, and each section has 1 water cart, the baggage and forge of the company being carried on 2 general service wagons with the head-quarters of the company. The total strength of such a company consists of 4 officers, 4 warrant officers, 301 men, 10 government vehicles, and 195 horses with 1 mounted medical officer attached.

A company organised as a supply park for 3 days' supplies for an army corps numbers 7 officers, 7 warrant officers, 526 men, and 747 horses, with I mounted medical officer and I veterinary officer attached. The vehicles are all hired.

# g. Royal Army Medical Corps.

IN PEACE-TIME.

The body of officers of the Royal Army Medical Corps comprises besides the Director General an establishment of administrative officers consisting of 10 Surgeon Major-Generals, 23 colonels, and 799 of-

<sup>&</sup>lt;sup>1</sup> I mounted medical officer and I veterinary officer attached.

<sup>&</sup>lt;sup>2</sup> I mounted veterinary officer attached.

ficers of the rank of Lieutenant Colonels and downwards besides quartermasters, apothecaries, and acting officers. On the British establishment (United Kingdom and colonies) there are borne on the lists: 7 Surgeon-Major Generals, 13 Colonels, 477 surgeons of the rank of Lieutenant Colonels downwards, 85 civil surgeons employed on military duty (mostly from the reserve), 35 quartermasters, and 1 apothecary.

The Principal Medical Officer and the Senior Surgeons are the chiefs of the sanitary service in the military districts, and the rest are employed on active duty with the troops, and in the hospitals. In times of peace medical officers are no longer attached permanently to particular bodies of troops, but the *personnel* of the Royal Army Medical Corps is under the command of the Medical officers.

There are two kinds of hospitals, viz: General hospitals and garrison hospitals. Of the first category there are but two in the United Kingdom, viz: The Royal Victoria Hospital at Netley (Southampton), and the Herbert Hospital at Woolwich. To these are admitted the invalids from India and the colonies, as well as patients from the two above named garrisons, and sick or wounded officers. In every garrison there are garrison hospitals for sick soldiers, under the superintendence of surgeons holding the rank of Lieutenant Colonel Major, who have under them a *personnel* of Medical officers and men drawn from the Royal Army Medical Corps.

The Royal Army Medical Corps is composed of 19 companies and I depôt. Three companies and the depôt are at Aldershot, 2 at Netley and of the rest I at each of the Head-quarters of the 14 remaining military districts of the United Kingdom. The strength of these companies varies according to the number of the hospitals to which they are attached. In all, the corps comprises 39 warrant officers, 140 staff sergeants, 220 sergeants, 305 corporals, 12 buglers, and 1926 privates. In times of peace the men of the Royal Army Medical Corps are employed only in the United Kingdom and in the colonies, but not in India.

The uniform of the Royal Army Medical Corps consists of darkblue tunics and serge frocks with red piping, collar and facings of darkblue cloth (of black velvet for officers), darkblue trousers with two small red stripes (broad red stripes for officers), and helmets with balls similar to those of the artillery. In addition the helmet is adorned with a red cross in front. The leather belts are white (for officers black with gold lace) and the equipment is similar to that of the infantry. The side-arms of the sergeants are swords; of the men sword bayonets.

#### IN WAR.

In war a surgeon is attached to every Unit (battalion, cavalry-regiment, detachment, &c.), who has at his disposal trained ambulance men (2 for each company), besides I corporal and I private. The latter leads the mule which carries packed in panniers the drugs and medical stores.

To every brigade of infantry or cavalry there is attached a medical section composed as follows:—

- 1 Major
- 2 Captains or Lieutenants
- 3 Officers
- I Warrant Officer
- 1 Quartermaster sergeant
- I Sergeant acting as apothecary
- 4 Sergeants
- 1 Bugler
- 6 Corporals
- 44 Privates (inclusive of 32 ambulance bearers, 3 cooks, &c.)
- 57 men
- 4 saddle-horses (for the use of the officers and the warrant officers)-

The detachment has 15 vehicles, viz: 2 wagons for provisions and tents, I water cart, 10 hospital-wagons, I wagon for utensils, and I wagon for drugs. These are horsed from a company of the Army-Service-Corps attached to the brigade, as was explained under f.

During an engagement the company is divided into:

- a) Two sections of ambulance men under a surgeon, each consisting of 1 sergeant and 16 men;
  - b) a collecting station with a sergeant;
  - c) the ambulances with 5 corporals and 5 privates;
- d) a Dressing station in charge of a major with I surgeon, I warrant officer, I apothecary, I sergeant, I bugler, I corporal and 4 privates, one of whom acts as cook. The rest of the *personnel* remains with the baggage. The wounded are brought to the Dressing stations by the ambulances and ambulance men, and after having their wounds dressed, and received refreshment they are passed on to the field hospitals.

A field hospital is attached to every Division and to the Corps troops; in all, an army corps has 10 field hospitals, of which each has room for 100 sick or wounded. Its *personnel* consists of:—

- I Lieutenant Colonel
- 1 Major
- 2 Captains or Lieutenants
- 1 Quarter Master
- 5 Officers
- I Warrant Officer
- 7 Staff Sergeants and Sergeants
- 4 Corporals
- 23 Privates
- 34 men

with 6 saddle-horses.

The vehicles which are horsed like those of a detachment of the Medical Corps consist of I cart for provisions and tents, I water cart, 4 wagons for Medical stores and equipment, and reserve rations.

Whilst the engagement is proceeding the field-hospitals are placed out of range of the enemy's fire, and there the wounds are finally dressed, and the wounded are tended till they can be transported to the Line of Communication Hospitals.

In war the whole medical corps wears a white band with the red cross on the left upper arm; all the vehicles belonging to the medical sections are marked with the red cross, the Dressing Stations and field-hospitals are indicated by the Geneva flag.

## h. Various Corps and Branches.

#### I. ROYAL BODY-GUARDS.

"The Honourable Corps of Gentlemen-at-Arms" constitute the special body-guard of the Queen, and consists of I Captain, who must be a Peer of the Realm, 4 Officers and 35 Guards. The Officers must have held in the army the rank of at least lieutenant-colonels, the Guards that of Captain; all must have served at least in one campaign, and have been decorated.

"The Royal Company of Archers of Scotland" is the Scotch body-guard of the Queen, but does duty in Scotland only, and consists of 500 gentlemen, mostly members of the Scotch nobility.

"The Royal Body-Guard of Yeomen of the Guards" consists of a captain (as with the "Gentlemen-at-Arms"), 6 Officers (mostly

former captains), and 140 Yeomen, who must have held the rank of sergeants in the army, and taken part in a campaign. This corps is in garrison in the Tower of London, wears a red costume of the 15th century and takes part in all the state and court ceremonials.

#### 2. MILITARY POLICE.

On the peace footing a mounted corps of military police consists of 2 officers (quarter-masters), I warrant officer, 8 sergeants, 109 corporals and privates with 81 horses; a corps of dismounted police consists of I warrant officer, 29 sergeants, and 202 corporals and privates.

Both these corps are recruited from other arms by transferring soldiers with good characters, who have served at least 4 years, and have extended their engagement to 12 years. They do police duty in the garrisons and camps of the United Kingdom. Their uniform is darkblue with red collar, facings, and stripes on the trousers. Their head-gear is the infantry helmet. The mounted police wear gaunt-lets. The leather belts are brown, and their equipment corresponds respectively to that of the cavalry and of the infantry. The mounted police are armed with swords and revolvers, the dismounted with sword bayonets and revolvers. Their badge consists of a white band on the lower sleeve of the right arm with the letters M. M. P. ("Mounted Military Police") or M. F. P. ("Military Foot Police").

In war time the military police is distributed in small bodies to the several staffs, from the brigade-staff upwards (see Chapt. VIII).

## 3. FIELD-SIGNALLING COMPANIES.

In times of peace there exist no cadres for these companies, but they are formed on mobilisation with such cavalry and infantry soldiers as have successfully passed through the signalling school. These companies are distributed as required. A mounted company comprises I officer, 2 sergeants, 34 men with 33 riding and 10 draught horses, and 5 carts; a dismounted company 2 officers, 2 sergeants, 33 men with 2 riding and 6 draught horses, and 3 carts. The mounted men are armed with swords and carbines, and the dismounted with infantry rifles. Their duty consists in organizing and occupying the flag or heliograph signal station.

#### 4. FIELD-POSTS.

There are no cadres for field-posts in times of peace; men enlisted for service in the field-posts are immediately put in the Reserve,

as has been mentioned in Chapter I, and are bound to join the 24th Middlesex Rifle Volunteers. In times of war they are distributed (see Chapter VIII) to the several staffs from the brigade-staff upwards.

## 5. ORDNANCE AND ARMY ORDNANCE CORPS.

Under the command of the Inspector General of Ordnance the Army Ordnance Department supplies both the army and the fortresses with their necessary equipment and Ordnance stores, and distributes them. This department has to provide all the arms and ammunition; also field-clothing and equipment, and utensils for barracks, hospitals and military prisons; it keeps all these requisites in store, issues and renders account of them. It also examines and passes such articles, as are supplied to the army by government and private factories, gun foundries, and laboratories, excepting provisions and clothing in times of peace.

In every military district an officer is in charge of the ordnance, and has under him a number of junior ordnance officers and men, as well as a civilian *personnel* of clerks and workmen. The Principal Ordnance Officer at the Royal Woolwich Arsenal administers the reserves kept there in store, and issues the necessary quantities to all the garrisons, except those of India. When delivered they are taken in charge by an ordnance officer, and either issued to the troops, or kept in the ordnance store to be ready in case of mobilisation.

The department for the general ordnance-service reorganised in the year 1896 numbers 66 officers of various ranks, and 65 "Commissaries of Ordnance" of various grades, who also are included in the body of officers. The branch for examining the articles delivered numbers 35 officers, that for examining the range finding instruments 6 officers, and for the electric machines and steam engines 19 officers. In all the Ordnance branch employs 191 officers, of whom 3 are engaged in the War Office.

The Ordnance-Corps consists of 62 warrant officers, 142 sergeants, 5 buglers, 702 corporals and privates, which form 10 companies, besides a depôt at Woolwich. The corps is recruited by men transferred from other arms, who volunteer for that service, and must have served at least one year, and also by direct enlistment, if men of this sort do not present themselves in sufficient numbers. Both these categories of men are trained for their special duties at the depôt. To the corps of officers charged with examining the articles

delivered from the arsenals also belong I warrant officer, 9 sergeants, and 30 men.

The armourers constitute a special section of the corps; they number 18 warrant officers and 299 sergeants and men (100 of whom are in India); they are attached to infantry battalions, cavalry regiments, and to various establishments, and are charged with repairing and keeping in order the small arms and machine guns. These men are either drawn as privates from other arms, or are enlisted directly. They must be armourers by trade. After having passed through a 4 to 6 months' course of training in the small arms factory at Birmingham they are promoted to the rank of armourer sergeant, and are attached to some body of troops. They must serve 12 years and may engage for 21 years.

Finally there exists a section of 196 staff-sergeants and sergeants (inclusive of 13 in India), who are employed as Armament Artificers in the fortresses, and have to repair and keep in order guns, gun-carriages, &c. They are recruited in the same manner as the armourers.

The uniform of the ordnance corps consists of darkblue tunics with collar and facings, and the letters A. O. C. on the shoulder straps; darkblue trousers with two small red stripes, and infantry helmets. The leather belts are white, and the equipment is the same as that of the infantry. The warrant officers and staff-sergeants are armed with swords and revolvers, the sergeants and men with carbines and sword bayonets.

In war the Army Ordnance Corps is mostly employed on the line of Communications at the Advance-Base and at the Main-Base, which are naturally the chief-depôts for stores and ordnance. The strength of the detachment employed depends on circumstances, and a company employed on the lines of communication numbers I officer, I3 sergeants, I bugler, 66 men, and I horse. In the field there are employed with the staffs of an army corps, only I officer with 2 clerks.

#### 6. ARMY PAY DEPARTMENT.

The service of this department consists, as the name indicates, in receiving and distributing the moneys required for the troops, &c., as well as keeping the accounts of the amounts allotted for various purposes. The department consists of 16 Chief Paymasters, holding the rank of colonels, 76 staff-paymasters, holding the rank of lieutenant-colonel or major, and 117 paymasters with rank of major or

Captain. All these are officers, who formerly were on the active list. The *personnel* of clerks forms the Army Pay Corps, and consists of 32 warrant officers, 368 staff-sergeants and sergeants, 148 corporals, and 30 privates. This corps is recruited from suitable men drawn from other arms. In peace time this corps serves only in the United Kingdom and in the colonies. India has an organisation of her own.

The paymasters are not attached to different units, but are employed in the pay-offices of the garrisons. They issue the sums required for the pay of the troops week by week, and monthly or quarterly the special allowances of officers (for service, forage or lighting, &c.). The officers' pay is handed to the regimental agent (the banker) of the corps of officers. The paymasters of the offices attached to the garrison of a regimental district have to attend to the payments of pensioners, army reserve-men, and cadres of all bodies of auxiliary troops in the district, and to defray all the expenditure for the militia, yeomanry, and volunteers. The paymasters of the garrison pay office of a military district liquidate all the outlay for the different staffs and establishments of the district. The latter include the expenditure for the purchase of provisions and forage, for transport of military stores, for payment of civilian workmen, &c., but only for accounts not exceeding £100. Accounts for larger amounts must be submitted to the War-Office.

The uniform consists of darkblue tunics with yellow collar and facings, darkblue trousers with two small yellow stripes, and infantry helmets; officers wear cocked hats with feathers. The equipment of the men is similar to that of the infantry.

In war the field-pay offices are opened only at the advanced, and also at the main base of the line of communications. There is in addition a sub-pay office open at every post along the line of communication.

#### 7. THE VETERINARY SERVICE.

At the head of the Veterinary Service stands its Director General, who holds the rauk of Veterinary Colonel. There are subordinated to him 8 Veterinary Lieutenant-Colonels, and 123 Veterinary Majors, Captains and Lieutenants, of whom about one half are employed in the United Kingdom and in the Colonies, and the rest in India.

In every military district a Senior Veterinary Surgeon is on duty in the capacity of Principal Veterinary Officers of that district. He frequently inspects all the horses and mules, as well as the stables and the forages, and superintends the Veterinary Service in general. A veterinary surgeon is attached to every cavalry regiment; the other surgeons are distributed amongst the other mounted troops in the garrison. These officers are in charge of the horse infirmaries and veterinary stores, and also of the smiethies and of the men employed therein. They have also to watch over the shoeing of the horses, the healthful state of the stables, and the quality of the forage supplied.

The uniform of the Veterinary Surgeons consists of darkblue tunics with crimson red velvet collars and facings, darkblue trousers with broad, red stripes and infantry helmets. The belts are of white patent leather.

In war two veterinary surgeons are attached to each cavalry regiment, also to each brigade, division of artillery, to the Engineers of an army-corps, and to the staff of the same army-corps, and one veterinary surgeon to those companies of the army-service-corps, which are attached to Brigades or Divisions, as well as to the staffs of the Divisions. In addition to these a number of veterinary surgeons are employed on the lines of Communication, and especially at the remount depôts, and at the horse-infirmaries.

#### 8. DIVINE SERVICE.

In the larger garrisons there are special garrison churches or chapels for the several religious sects; but in the smaller garrisons the troops attend Divine worship at the usual places of worship of the town. Every soldier, who is not on duty or absent on leave is taken to church once every Sunday, when the band plays, and the men appear in full uniform. The military chaplains are subordinated to the Chaplain General, who holds the rank of a Major General, and they are divided into 4 classes with the respective ranks of Colonels, Lieutenant-Colonels, Majors, and Captains. In all the army employs 86 military chaplains (one quarter of whom are in the colonies). Of these three-fourths are members of the Church of England, the remainder are Roman Catholics and Scotch Presbyterians.

## i. Colonial Troops.

The West Indian Regiment consists of three battalions of 8 companies each, and of a depôt of 2 companies. One battalion and the

depôt with the staff are in garrison in Kingston (Jamaica) in the West Indian Isles, and the other battalions are serving in St. Helena and the West Coast of Africa; they are relieved periodically. On account of the unhealthy climate of these garrisons, the establishment of officers in this regiment is exceptionally high. In each battalion there are 41 officers, viz: 2 Lieutenant-Colonels, 4 (5) Majors, 8 (7) Captains, 16 Lieutenants, 9 Second Lieutenants, 1 Adjutant, and I Quarter-Master. Every battalion comprises 2 warrant officers, 50 staff-sergeants and sergeants, 16 drummers, and 40 corporals. The battalion in the West Indies numbers 862, and these on the West Coast of Africa and St. Helena respectively 763 and 862 privates. To the depôt belong moreover: II officers, I warrant officer, 15 staff-sergeants and sergeants, 4 drummers, 10 corporals, and 250 privates. In all the regiment numbers accordingly 134 officers, 7 warrant officers, 165 sergeants, 52 drummers and 2876 rank and file.

The officers of these regiments are recruited in the same way as those of every other regiment of the regular infantry. The warrant officers and about half of the staff-sergeants and sergeants are natives of Great Britain, who have at their own request been transferred from other regiments of foot; the rest are West Indian negroes, mostly from Jamaica.

The regiment wears a Zouave uniform, consisting of short, white jackets with red waistcoat without sleeves and darkblue baggy trousers with white gaiters. Their head-dress is a red fez with white turban. Accoutrements and arms are like those of the other infantry regiments. The officers wear the regular infantry uniform with cork helmets.

The "Hong-Kong regiment" consists of only one battalion of 8 companies; it is recruited from Mahomedans of the Punjaub, and is stationed constantly at Hong-Kong. It is organized like the batalions of the Indian army; the establishment of British officers is small, numbering 10 only. The companies are commanded by native officers. One British Officer is the Commander of the battalion, 2 command the Wings (i. e. half-battalions), 1 is the Adjutant, and 1 is the Quartermaster; the other 5 are employed as necessity arises. All the British Officers rank above the natives. Of these latter the regiment contains 17 officers, 53 sergeants, 16 buglers, 48 corporals, and 870 privates; in all then 1004 natives.

The British Officers either belong to the Indian army or to the

British Infantry, and are attached to the battalion for 5 years, during which time they are seconded in their own regiments. The men are enlisted for 5 years and may re-engage.

The uniform is similar to that of the Indian infantry, and consists of a red serge frock with yellow facings and collar; darkblue baggy trousers with puttees and yellow turbans; usually however these men wear a uniform of yellowish brown drill. The leather belts are brown, the accoutrements and armament is like that of the infantry, but they carry no knapsack.

The "Royal Malta Artillery" regiment consists of 6 companies, is constantly stationed at Malta. Officers as well as privates are recruited from the Maltese. The strength of the battalion amounts to 27 officers, 2 warrant officers, 48 staff-sergeants and sergeants, 12 trumpeters, 12 corporals, 12 bombardiers, and 612 gunners; in all 725 men. Uniform, equipment and arms are similar to that of all other garrison artillery; the tunic is adorned with the Maltese Cross on the shoulder straps.

The "Asiatic Artillery" comprises 4 companies in Hong-Kong, one company in Singapore, 2 companies in Ceylon, and 2 companies in Mauritius. It is recruited from natives of India, mostly Mahomedans, and has only small cadres of British officers. The 4 companies in Hong-Kong number 9 native officers and 446 men. The two companies of Ceylon and Mauritius number each together 4 native officers and 196 men, and the company in Singapore has 3 native officers and 119 men. The uniform is that of the garrison artillery, but it has an Indian cut; their head-dress is a red turban.

The "African Artillery" consists of one company in Sierra Leone (100 men), one in Jamaica (99 men), and one in St. Lucia (100 men), and like the West Indian regiment it is recruited from West Indian negroes. Every company is commanded by a British officer. In cut the uniform is similar to that of the West Indian regiment, but it is darkblue with red facings and red stripes on the trousers.

To the Asiatic and African Artillery are attached: 3 Majors, 12 Captains, 23 Lieutenants, and 30 staff-sergeants and sergeants of the garrison artillery.

"Asiatic Submarine Mining Detachments" of 50 men each are stationed at Singapore and in Ceylon, and of 70 men at Hong-Kong. The "African Engineers" comprise one fortress company (81 men) in Jamaica with detachments in St. Lucia and Sierra Leone, and a

submarine mining company (60 men) in Jamaica. These bodies of troops are recruited from the same races of men as the respective Asiatic and African artillery, and their uniform is similar to that of the regular engineers. They are commanded by British engineer-officers, and their subordinates, who are charged with the supervision of the 5 bodies of torpedo-troops are also natives of the United Kingdom. They number 23 sergeants, 2 buglers, 75 corporals, and 43 sappers.

## III. The Militia.

## a. Infantry.

As has already been explained in Chapter II the Militia infantry forms the 3d and 4th up to in some cases the 5th and 6th battalions of the territorial infantry regiments, and the 5th to 8th battalions of the rifle regiments. The number of battalions in every regiment is in proportion to the population of the regimental district, as has been indicated in Chapter II. It must, however, be added that the coast-districts raise the greater part of the Militia artillery, and are therefore not able to supply in every case the prescribed number of 2 infantry battalions for each district.

In all there are 126 battalions of infantry, whose number of companies varies according to the population from 4 to 12. Of these battalions 2 have 12 companies each, 27 have 10 each, 61 have 8 each, 3 have 7 each, 26 have 6 each, 5 have 5 each, and 2 have 4 each. For every battalion there exists a cadre supplied by the regular battalions of the regiment, consisting of:—

- 1 Captain, acting as Adjutant
- 1 Quarter-Master
- 2 Officers
- 1 Sergeant Major
- 1 Quartermaster Sergeant
- I Sergeant Instructor
- 1 Sergeant Drummer
- 4—12 Colour-sergeants (1 for each company)
- 4-12 Sergeants (I for each company)
- 4—12 Drummers (1 for each company)
- 16-40 men from the sergeant major downwards.

Scotch Highland battalions have a sergeant piper in addition. Every battalion is commanded by a Lieutenant-Colonel of militia, who is supported by 2 Majors. If the battalion has only 6 or fewer companies, it has one Major only.

The company consists of:

- 1 Captain
- 1 Lieutenant
- 1 Second-Lieutenant (occasionally only 1 for every 2 companies)
- 2-3 Militia Officers
  - 2 Sergeants
  - 4 Corporals
- 100 Privates
- 106 Militia men.

Inclusive of the permanent cadres the numbers are as follows:-

```
A Militia battalion of 6 companies has 19 officers, 658 men

"" " " 8 " " 25 " 878 "

" " " " 10 " " 30 " 1094 "

" " " " 35 " 1312 "
```

In case of mobilization the militia battalions mobilized for field service have the same strength as the mobilized regular battalions; those belonging to the garrison of the forteresses retain the strength of their peace-footing.

The uniform of the militia is identical with that of the regular battalions of their regiment; except that the men in addition to the name of the regiment wear the number of the battalion on their shoulder-straps, and the officers have the letter M embroidered on their shoulder-straps. Arms and equipment are identical with those of the regular infantry.

## b. Garrison Artillery.

The garrison artillery of the militia consists of 32 battalions, which are named after the counties from which they are recruited. Of these 4 belong to the "Eastern Division", 19 to the "Southern Division", and 9 to the "Western Division" of the regular garrison artillery. As with the infantry so also here the battalions are of very various strength, viz:

The permanent cadres and the staffs of the battalions are of the same strength as with the infantry. Each company has

- 2-3 Officers as with the infantry
  - 2 Sergeants
  - 4 Corporals
  - 4 Bombardiers
  - 88 Gunners
  - 96 Militia men.

Inclusive of the cadres then a battalion of garrison artillery of the militia numbers:

If of 4 companies 13 Officers, 400 men,

" 5 " 16 " 499 "

" 6 " 19 " 598 "

, 7 , 22 , 697 , , 8 , 25 , 796 ,

These numbers hold for both the peace footing and the war footing.

Equipment, arms, and uniform of the militia artillery are the same as the regular garrison artillery; the only difference being that the men wear on their shoulder-straps the initial letters of the Division, and of the name of the battalion, and the officers the letter M.

## c. Engineers.

The engineers consists of 2 battalions of fortress-engineers, the "Monmouthshire" of 8, and the "Anglesey" of 4 companies, both recruited from Wales, where the population are mostly miners, besides 10 submarine mining detachments, who are charged with the submarine mining defences, and are named according to places, as follows: Portsmouth, Needles, Plymouth, Thames, Medway, Harwich, Milford Haven, Western, Falmouth, and Humber.

The engineer-battalions are organized like the infantry-battalions, and have, excluding the instructors of musketry the same staffs of battalions and cadres. Each of their companies number:

- 3 Officers
  - 4 Sergeants
  - 6 Corporals
  - 6 Second corporals
- 84 Engineers
- 100 Militia men.

The "Monmouthshire" battalion numbers in all 27 officers, and 825 men, the "Anglesey" battalion 14 officers and 415 men.

The strength of the submarine-mining-sections varies according to local circumstances. Each of their cadres consists of:

- 1 Sergeant Major or Quartermaster-sergeant
- 1-2 Colour sergeants of companies
- 2-4 Sergeants
- 1-3 Buglers.

The number of officers varies between 4 and 7, and that of the men between 41 and 90.

The strength of militia engineers on war footing in the same as on peace-footing.

Uniform, equipment and arms are the same as of the engineers of the regulars, having the name of their section on the shoulder-straps of the men, and the letter M on the shoulder-straps of the Officers.

## d. Army Medical Corps.

The Army Medical Corps consists of 6 companies, which are recruited from Hampshire, Middlesex, Surrey, the Eastern Counties, Berkshire and Kent. The cadre comprises I quartermaster-sergeant, 6 sergeant majors, 6 sergeants, and the establishment numbers I Major, 14 Captains and Lieutenants, 24 sergeants, 36 corporals, 6 buglers, and 519 privates; making in all 15 Officers, and 598 other ranks.

Equipment, arms, and uniform are the same as for the Royal Army Medical Corps, except that the shoulder-straps of the men, and the shoulder-pieces of the Officers are marked with the letter M.

#### e. Militia of the Channel Isles.

The special organisation of the militia of the Channel Isles has already been described in Chapter I. It consists of three battalions of artillery, and six battalions of infantry.

Each of the artillery battalions of Jersey and Guernsey consists, inclusive of their cadres, of 6 companies, 24 Officers and 429 men; the Alderney battalion has a strength of 2 companies of 9 Officers and 183 men.

Each of the three infantry battalions of Jersey has an establishment of 24 Officers and 489 men in 6 companies; the three battalions of Guernsey have an establishment of 24 Officers and 429 men, also divided into 6 companies.

The cadres of these battalions are of about the same strength as those of the British militia, but they have neither sergeants nor drummers. The uniform is the same as that of the infantry of the British militia; equipment and arms are identical with those of the regulars.

#### f. Colonial Militia.

Only the militia of Malta and Bermuda are borne on the specifically British establishments.

The former consists of two battalions of infantry of 10 companies, each having a cadre of 2 Officers and 36 men, and a force of militia numbering 33 Officers and 1060 men, as well as a submarine mining section of 1 Officer, and 2 sergeants of the cadre and 60 militia men. Be it noticed, that this militia has a more thorough organization than all the others, as the infantry drill 60 times a year, and pass 12 days a year under canvas, and the submarine miners are called out 170 days every year. The uniform is that of the British militia; the infantry has blue facings. Both officers and men are Maltese without exception.

The Bermuda militia consists of one company of artillery with a single cadre, comprising I Captain, I sergeant major, I sergeant all of the regular artillery; the militia force numbers 3 Officers, and 100 men, as well as a submarine mining section with a cadre of I Lieutenant and 2 sergeants of the regular engineers, and a militia force of 40 men.

# IV. The Yeomanry Cavalry.

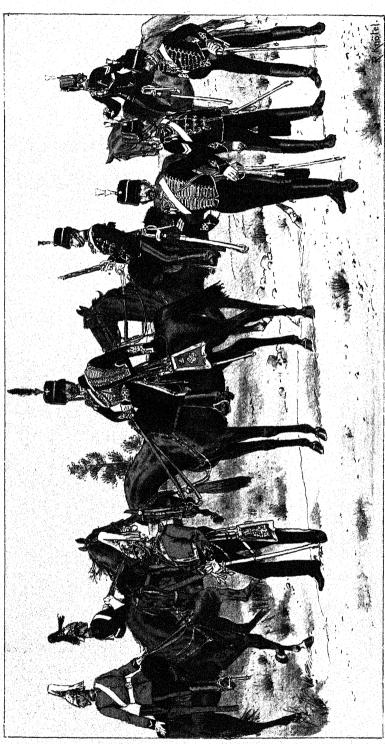
There are 38 regiments of Yeomanry Cavalry in Great Britain, viz: 34 in England and 4 in Scotland. The Irish regiments were disbanded in 1807. All the existing regiments are named after the counties, in which they are raised, and some are designated as hussars, others as dragoons, but more on account of the uniform, than of the size of men and horses. As is the case with all the other non-regular regiments, so also are the Yeomanry of various strengths.

There are:

12 regiments of 4 squadrons each,

10 ,, ,, 3 ,, ,,

16 ,, ,, 2 ,, ,, in all 110 squadrons.



, Berks Yeomanry Koyal Glasg. Private in Marching Order Private in M

Koyal Giasgow Yeomanry
Private in Marching Grder
Lothians and Berwick Yeomanry
Lieutenant in Levee Order

Yorkshire Hussars Officer in Review Order

Middlesca Hussars

Oxfordshire Hussars

Private in Marching Order

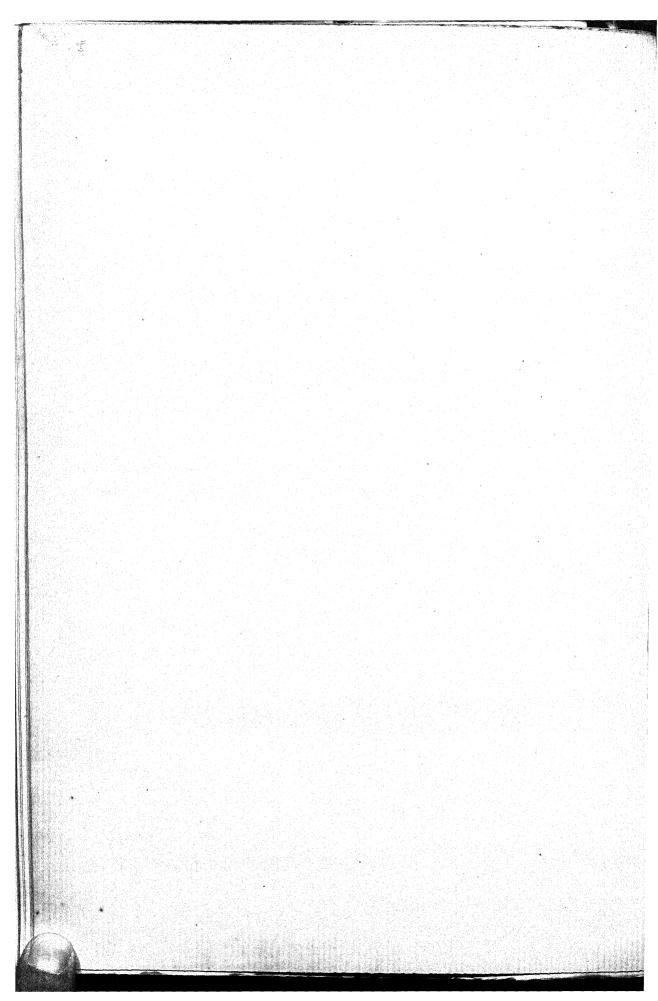
Corporal in Marching Order

Corporal in Marching Order

Lellestershire Yeomany

Quarter Master Sergeant in Marching Order

Lellestershire Yeomany



The regimental staff consists of:

- I Lieutenant Colonel (but not in the regiment of only I squadron
- 1 Major
- I Surgeon
- I Veterinary surgeon (with the regiments of 3 and 4 squadrons)
- Sergeant Major of the permanent cadre.

2-5 Sergeants of the perma
The squadron numbers:

- 2 Captains (the Senior Captain being the squadron commander)
- 2 Lieutenants
- 1 Second Lieutenant
- 5 Officers
- I Squadron sergeant major
- I Quartermaster sergeant
- 6 Sergeants
- 6 Corporals
- 2 Trumpeters
- 84 Privates

100 men.

The strength of the regiments accordingly are:

```
1 regiment of 4 squadrons: 24 Officers and 406 men
```

Every Officer brings out for training at least 2 horses, and every yeoman one horse of his own; therefore the number of horses (exclusive of the officers chargers) is equal to that of the number of men.

The regiments of Yeomanry Cavalry are organized into 18 brigades of 2 regiments each (the 11th brigade, however, has 3). One regiment—the Pembrokeshire—is not brigaded at all. Every brigade is supplied with an officer of the regular cavalry, acting as Adjutant, who at the same time does duty both as Adjutant of Brigade, and as Adjutant of the 2 regiments; moreover every regiment has a Yeomanry Officer acting as assistant to the Adjutant. The Senior of the two Officers commanding regiments is the Brigadier.

The uniform of the Yeomanry regiments is similar to that of the regulars; 12 as dragoons, and 26 as hussars. The former wear either blue or red tunics, the latter blue, green or red hussar tunics. Some regiments have retained the old uniform of the fifties; the hussars wear dolmans trimmed with fur.

Equipment, saddles, and arms are those of the regular cavalry, but without lances.

## V. The Volunteers.

## a. Infantry.

The infantry battalions of the Volunteers of a territorial regimental district are numbered *inter se*, e. g. 1st Volunteer battalion "The Hampshire Regiment" (the number of battalions of each regiment is given in chapter II). In all there are 215 battalions, being I corps of 3 battalions (The Queen's Rifle Volunteers, Royal Scots), and 212 unattached battalions. These battalions are of various strength, depending on local circumstances, and on the population; as follows:

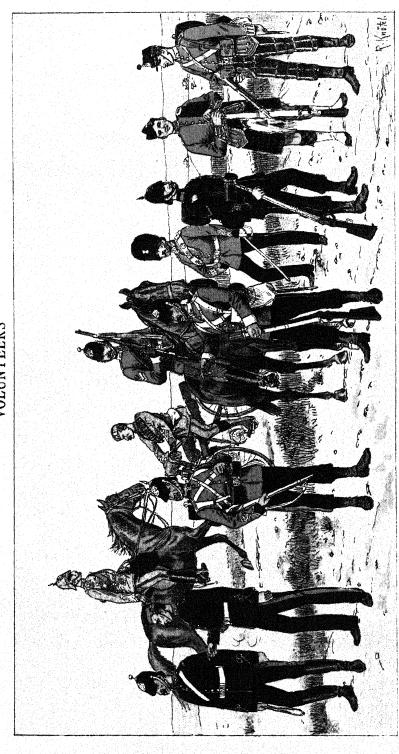
```
23 companies (3d Volunteer battalion Welsh Regiment)
I battalion has
2 battalions have each 16
I battalion has
6 battalions have each 13
                       12
             . ,,
                       11
13
                       TO
65
11
18
                             " (Eton College, Inns of Court, 9th Middlesex)
3
 1 battalion has
                             " (Corps of cyclists)
                              " (Isle of Man)
                        Ι
                              " (Bank of England).
```

The battalions of less than 6 companies have no Adjutant of their own, but are attached to other battalions. These are bodies of troops exceptionally situated, as has been explained above.

Every battalion has a permanent cadre, consisting of I Adjutant (Captain), I sergeant major, and I to IO drill sergeants, according to the number of localities over which the companies of the battalion are distributed. All these are drawn from the battalions of regulars of the territorial regiment.

The staff of the battalion numbers:

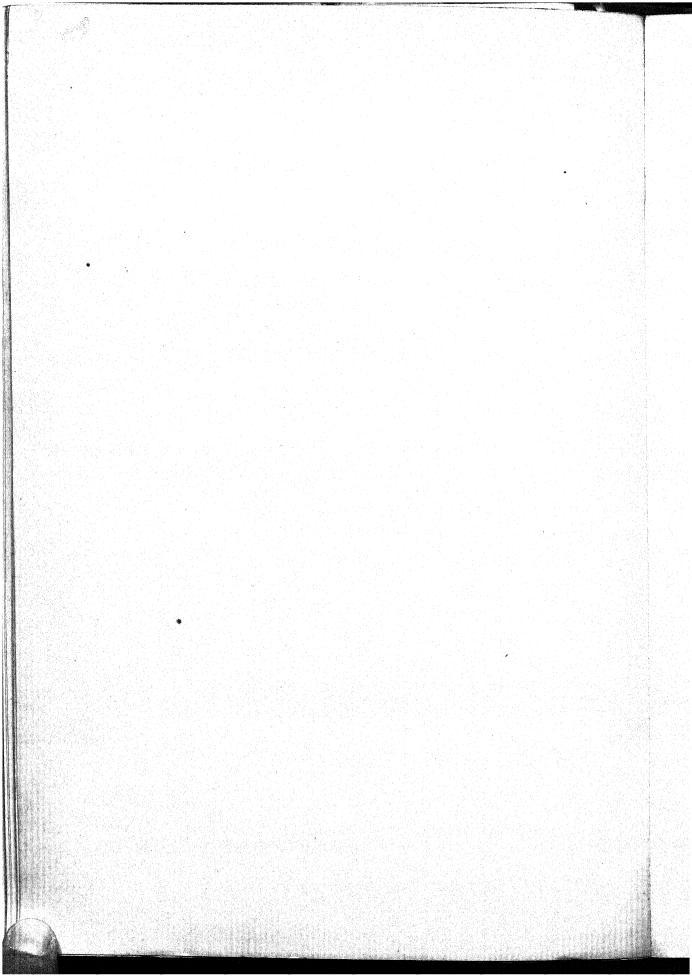
- 1 Lieutenant-Colonel, Commander of the Battalion
- I Second Lieutenant-Colonel, if the battalion numbers 12 or more companies (2 in the 3d Volunteer battalion Welsh Regiment)
- 1-4 Majors, according to the number of companies
  - 1 Quartermaster
- 3-4 Surgeons
  - 1 quartermaster sergeant
  - I bugler of the battalion
  - 1 armourer sergeant
  - 1 orderly room clerk.



13, Middlesex Rifle Volunteers Cyclin 1. Middlesex Engineers Sapper in Marching Order 13. Middlesex Rifle Volunteers
Seaf Officer 1. London Artillery Undress 1. Lanark Artillery Driver in Marching Order

4. Vol. Bat. Manchester Rgt. Certoral of mounted infantry and Private in Morehing Order

3. Vol. Bat. Royal Fusiliers 5. Vol. Bat. Highland Light Inf.
Lieucanut in Review Order
5. Vol. Bat. Manchester Rgt. 3. Vol. Bat. Highland Light Inf.
Linuse Gerporal in Review Order
d Infanty.
Private in Marching Order



#### A company numbers:

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1 Captain
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1-2 Lieutenants or Second Lieutenants (3 for 2 companies)

#### 2-3 Officers

- I Colour-sergeant
- 4 sergeants
- 5 corporals
- 2 buglers
- 85—86 privates
- 97-98 men.

Not to enter into too many details let it suffice to enumerate the total strength of battalions of 8, 10 and 12 companies. Exclusive of the cadres:

```
1 battalion of 8 companies has 27 Officers, and 773 men
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Exclusive of some battalions, as, for example, the regiments formed by university students, the Volunteer battalions are grouped in 33 brigades. These brigades consist, according to circumstances of 4—10, on an average 5—6 battalions, and have a staff of:

- 1 Colonel as Brigadier
- 1 Aide-de-Camp to the Brigadier
- 1 Brigade-Major (Officer of the General Staff)
- Brigade Surgeon, and
- 1 Supply Officer.

The uniforms of the Volunteer infantry are still as various as they ever have been. When these troops were first raised in 1859, the uniforms selected were mostly green or gray.

But of late orders have been issued, that the Volunteer infantry should wear the uniform of their territorial regiment, the rank and file having black braiding on the facings, and white buttons, as well as the name of the regiment, the number of the battalion, and the letter V on the shoulder-straps; the Officers to wear silver buttons and laces. The battalions of the rifle regiments wear bright green piping on the facings. These regulations are being carried out as fast as means will allow; at present 133 battalions wear red, 52 green, and 30 gray uniforms. The equipment is identical with that of the regular infantry. The arms are as in the regular infantry.

It may be mentioned here, that many battalions of Volunteers include a number of mounted men, about whose strength no returns

have yet been issued; also that in every battalion some men are trained and equipped as cyclists. One battalion of 3 companies the 26th Middlesex, consists exclusively of cyclists. In every battalion at least two men in each company are trained as ambulance men, and are supplied with stretchers, flasks, and all necessary materials.

## b. Cavalry.

Volunteer Cavalry only exists in Scotland, viz: One regiment in Fifeshire of 4 troops with a constant cadre of I Adjutant, I Sergeant Major, I Sergeant Instructor, and a force consisting of 17 Officers, and 224 rank and file with a like number of horses belonging to the men, and in the county of Forfar I company of 4 Officers, 56 rank and file, and I Sergeant Instructor with 61 horses.

The uniform is red with blue facings, similar to that of the regular dragoons; arms, equipment and saddlegear are the same as with the regular hussars.

## c. Artillery.

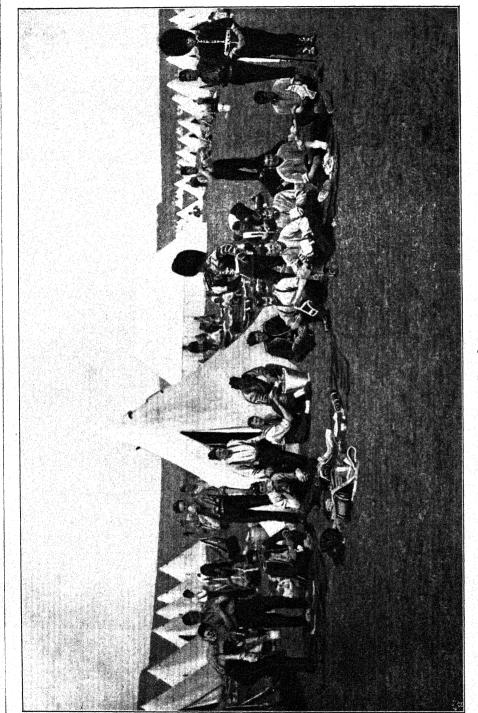
The Volunteer Artillery consists of 65 battalions of various strength, of which I consists of 17, I of 16, I of 15, 2 of 14, 2 of 13, 6 of 12, 4 of 11, 4 of 10, 12 of 9, 23 of 8, 3 of 7, 4 of 6, I of 2 companies, and 2 of I company each. These latter 3 companies are attached to other battalions. The battalions are named after the counties, in which they have been raised, and if there is more than one battalion in a county they are numbered consecutively.

The permanent cadres and staffs of battalions are of the same strength as of the battalions of infantry.

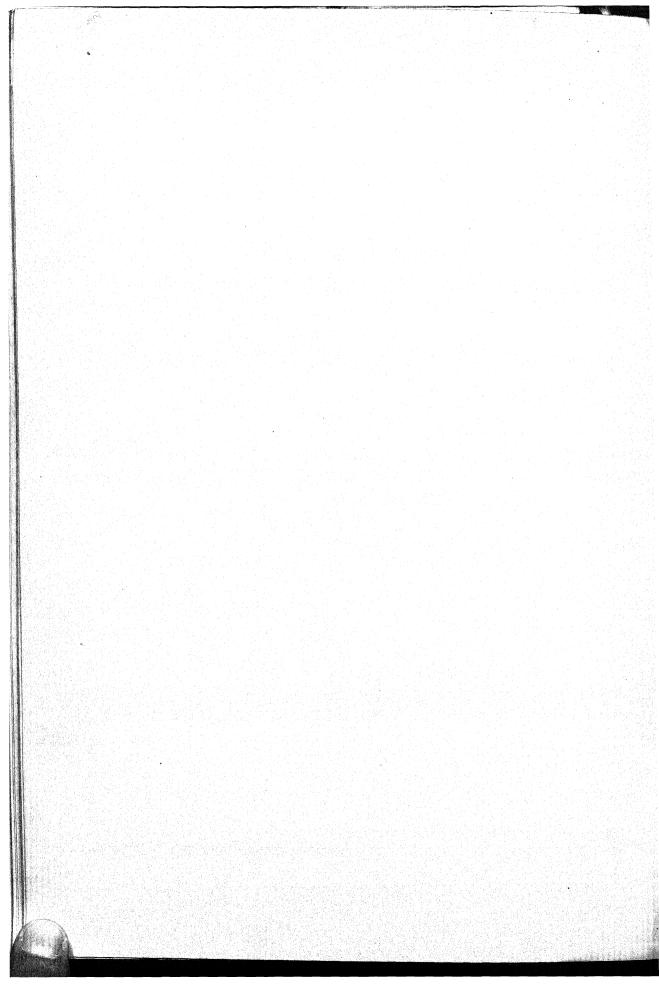
A company numbers:

I	Captain
1-2	Lieutenants
2-3	Officers
r	Sergeant major
3	sergeants
4	corporals
2	bombardiers
2	trumpeters
65-65	gunners
76-77	men.

Thus the strength of a battalion amounts, exclusive of the cadres:



Scots Guards in camp



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With a battalion of 6 companies to 21 Officers and 459 men,

"" " 8 " " 27 " " 613 "

" " " 12 " " 39 " " 921 "
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However only 24 of these battalions, which are trained as garrison artillery, are organised precisely on these bases. The other battalions form in all 98 batteries of position, viz: 23 battalions, who also form garrison batteries have each 1 to 3 batteries (29 in all), and 18 battalions, who have no garrison batteries, and are called battalions of position artillery have each 3 to 5 batteries (69 in all). The establishments of all the battalions are fixed according to the number of their companies, and a position battery is generally manned by two companies.

A battery of position consists of:

- 2 Captains (one being in command of the battery)
- 2 Lieutenants
- 1 Second Lieutenant
- 5 Officers
- 1 Sergeant major
- 1 Quartermaster sergeant
- 6 sergeants
- 8 corporals
- 4 bombardiers
- 2 trumpeters
- 97 gunners
- 30 drivers
- 1 farrier sergeant
- 2 sergeants
- 2 collar makers
- 1 wheeler
- 155 men.

The majority of the batteries is armed with 16 pounders muzzle-loaders, but those intended to garrison the fortresses in case of war are armed with 40 pounders breach loaders. The former have in times of peace 4 guns each with 2 ammunition waggons, the latter 4 guns with 6 ammunition waggons. The number of horses is determined by the General in command of the district, and depends on the kind of animals employed, and amounts to about 40 per battery.

The uniform of the Volunteer artillery is like that of the Regular artillery; it is only distinguished by white buttons and lace, red braid on the caps, and red braidings on the sleeves of the tunic. The

shoulder straps bear the number and the name of the battalion with the letter V. Arms and equipment are the same as that of the Regular artillery.

## d. Engineers.

The Volunteer engineers consist of 20 battalions of sappers, 7 submarine mining-sections, the corps of electrical engineers, and a corps of officers, who are railway officials.

The battalions of sappers are numbered and named after their respective counties, just as with the artillery.

Of these 2 have each 10 companies

The two latter are attached to other battalions. The composition of the battalions and companies is identical with that of the Volunteer infantry, except that each company has 5 second corporals and 79 to 80 pioneers. One battalion, the 2d Cheshire, consists of railwaymen, who are trained as railway troops.

The submarine mining-sections are named after the mouths of rivers that they have to defend, viz: the Tyne, the Severn, the Clyde, the Tees, the Forth, and the Tay and Mersey. Each consists of 3 companies, except the section of the Tees, which has only 2 companies. A section of 3 companies numbers: 13 Officers and 183 men, one of 2 companies 10 Officers and 123 men.

The Electrical Engineering Corps is destined to provide the staff for the electrical machinery in the fortresses, and numbers 29 officers and 547 other ranks, inclusive of permanent staff.

The "Engineer and Railway Volunteer Staff Corps" consists of 110 Officers of various ranks, who in their civil employment are mostly engaged as railway officials. In times of peace they are employed in drawing up time-tables and other regulations for the transport of troops; in case of mobilization they are engaged on the railway and on the lines of communication.

The uniform of the engineers is like that of the Regular engineers with white buttons and lace, white braid on the caps, and white

braidings on the sleeve of the tunic. The shoulder straps bear the number and name of the corps with the letter V. Arms and equipment are similar to those of the Regular engineers.

#### e. Medical Service.

The Volunteer Medical Service consists of the Volunteer Medical Staff Corps, and of the medical detachments of the Volunteer infantry brigades.

The former is divided into 14 companies, which are recruited from different counties; it has a permanent cadre of 1 Adjutant, 1 sergeant major, and 12 sergeant instructors. The staff of the corps consists of 1 Commanding Officer (Surgeon Lieutenant-Colonel), 1 surgeon major, 1 chaplain, and 1 armourer and clerk; each company has 3 Surgeons, 1 quartermaster, 3 staff-sergeants, 4 sergeants, 8 to 9 corporals, 2 buglers, and 78 to 79 privates; in all 100 men. For the 14 medical detachments, which, in case of mobilization, must be raised by this corps, and which are employed with the army in the field, 4 sergeants and 70 drivers are kept in readiness.

A medical detachment exists for each of the 33 Volunteer infantry brigades; it comprises 3 Surgeons, 7 staff-sergeants and sergeants, 1 bugler, and 53 privates. The surgeons are supplied by the battalions of the brigade; the detachment is commanded by the brigade surgeon, and is, in time of peace, attached to one of the battalions of the brigade.

The uniform is like that of the Royal Army Medical Corps with white buttons and lace, and name of the company or of the detachment on the shoulder-straps. Arms and equipment are like those of the troops of the line.

## f. Army-Service-Corps.

The Volunteers have no proper Army-Service-Corps. By way of experiment some detachments have had money allowed them to defray the hire of such a corps, but so far nothing definite has been determined.

To every Volunteer infantry brigade there is attached a Supply section, consisting of I sergeant, and 4 non-commissioned officers acting as clerks, and 3 privates, acting as butchers. This detachment is at the disposal of the Supply officers of the brigade, and is intended to issue provisions and forage.

## g. Colonial Volunteers.

The only Colonial Volunteers borne on the British Establishment is the rifle corps of Bermuda with a cadre of I Officer and 4 sergeants, and a Volunteer force of 14 Officers and 300 rank and file.

## h. Corps of Cadets.

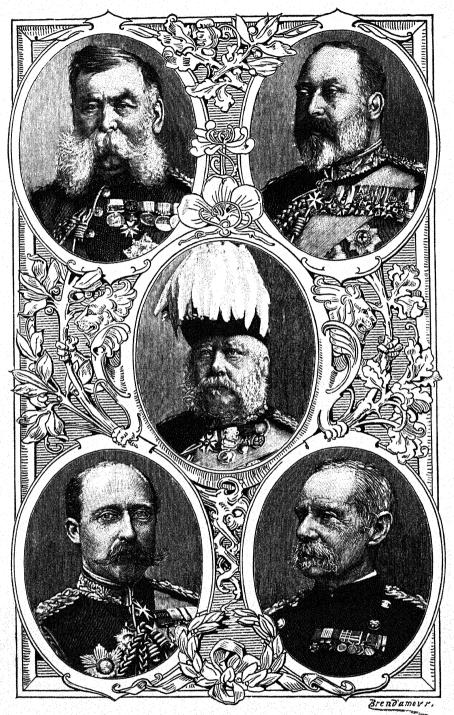
Many battalions of Volunteers have corps of cadets attached to them, which are mostly recruited from the elementary schools, and consist of boys of not less than 12 years of age. There exist also unattached battalions of cadets formed by boys of 14 to 17 years of age, who are under a more rigid military organization, and may to some extent be regarded as schools for the training of non-commissioned officers for the Volunteers.

## i. The Honourable Artillery Company of London.

The Honourable Artillery Company of London, a body of troops of great antiquity, is formed by wealthy citizens of London, and takes rank before all the Volunteers, but after the militia. The "Company" consists of a horse battery of 4 guns with 7 Officers, and 159 men; of a Field battery of 4 guns with 7 Officers and 155 men, and of a battalion of infantry of 6 companies with 26 Officers, and 536 men. The expenses of the "Company" are wholly defrayed by the men themselves. The uniform is identical with that of the Regular artillery, and of the guards for the infantry. Arms and equipments correspondingly.

# VI. Chief Commands and Staff of the Army in times of peace.

In the British army the Officers of the General Staff do not form a separate corps, nor are they, as in the German army moved from their regiments into the General Staff. The Officers, who receive appointments in the General Staff, must either have passed through the Staff College with satisfactory results, or must have gained high distinction in the field. They are appointed for 5 years (for some posts only for 3 years), and during this time they are seconded in their respective regiments. After the expiration of this appointment they either



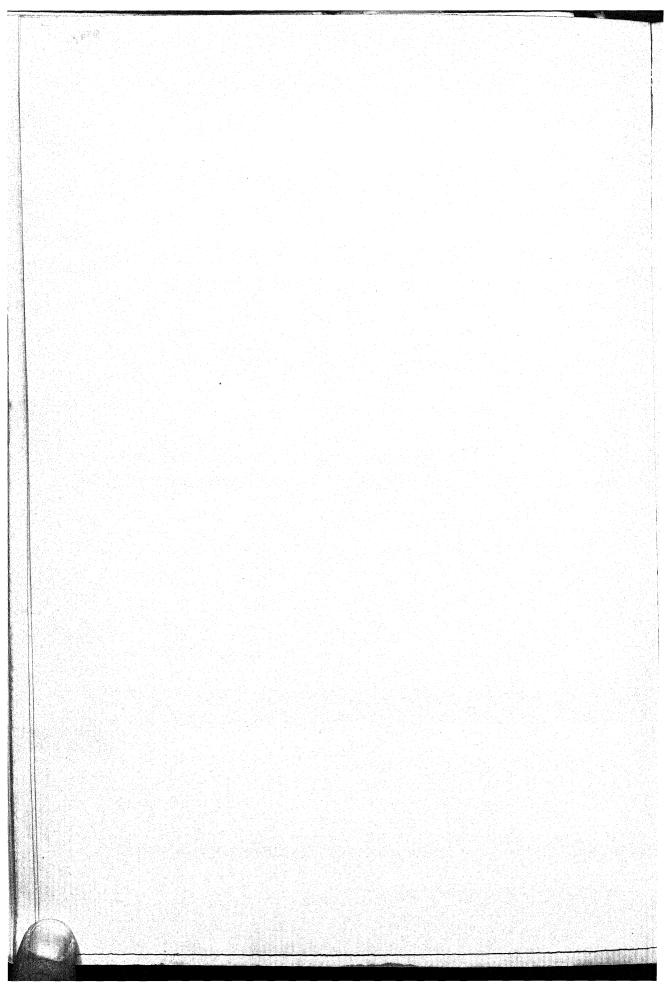
Sir J. L. Simmons Field Marshal

Prince of Wales Field Marshal

Duke of Cambridge
Field Marshai and Colonel General of the Army
Duke of Connaught
General and Commander of the AldershotDistrict

District

Duke of Cambridge
Field Marshal, Commander of the troops in Ireland



return to their regiment, or are employed in some other post of the General Staff. They enjoy no special advantages with respect to promotion, but they have better opportunity of distinguishing themselves in the field, and thus of attaining more readily to the rank of General. The Officers of the General Staff are divided into 5 classes:

Adjutant- or Quartermaster-General (from the Major General upwards);

Deputy-Adjutant- or Quartermaster-General (Colonel or Major General);

Assistant-Adjutant- or Quartermaster-General (Lieutenant Colonel or Colonel);

Deputy-Assistant-Adjutant- or Quartermaster-General (Captain up to Lieutenant-Colonel);

Staff-Captain (Captain).

With every class the rank of the Officers, who usually fill the posts is indicated in brackets. The last class but one includes those Officers of the General Staff, who are attached to brigades, and are called Brigademajors. Officers of the General Staff wear a gold aiguilette on the left shoulder of their regimental uniforms in full dress, and in undress have a blue serge frock with scarlet collar patches, and a round blue cap of the same pattern as worn in the Royal Navy with scarlet band and leather peak. The other portions of their uniform are of their regimental pattern.

The personal Staff of a General comprises according to his rank I to 3 (and in special posts even more) Officers, who are designated "Military Secretary", or "Assistant-Military-Secretary" and "Aide-de-Camp." The former are employed only with Generals of superior rank, and have to deal with confidential matters, such as the promotion of officers, &c.; the latter are appointed by the General himself and render him personal service. Previous to their appointment they must pass an examination in French, but they are appointed rather on account of private than of military considerations. The uniform of both classes is similar to that of officers of the General Staff.

The different ranks and designations of the Generals are given in Section III, Ch. 1. Their full-dress uniform consists of red tunic with blue collar and Brandenburg facings with rich gold embroidery, darkblue trousers with broad red stripes, and hats with red and white feather plumes. The undress consists of a simple blue frock coat with 2 rows of buttons, and shoulder-straps with gold lace; in march-

ing order they wear a cap like that of the General Staff, and a blue serge frock with scarlet collar patches with gold lace. Generals carry swords with a Mameluke hilt of white ivory. The badges of rank are indicated on the shoulder-straps, as follows:

Colonel, commanding a brigade: Sword and Field-Marshal's baton crossed;

Major General: Sword and Field-Marshal's baton crossed, and star; Lieutenant General: Sword and Field-Marshal's baton crossed, and crown;

General: Sword and Field-Marshal's baton crossed, star and crown; General Field-Marshal: Field-Marshal's batons crossed and encircled by a laurel-wreath.

The Queen is the head of the army. It is administered in her name by the Secretary of State for War, and commanded in her name directly by the Commander-in-Chief. The military retinue of Her Majesty consists of: 3 "Personal Aides-de-Camp", their Royal Highnesses, the Field-Marshal, the Duke of Cambridge, the Field-Marshal, the Prince of Wales, and General, the Duke of Connaught, and 40 Aides-de-Camp. The appointment as Aide-de-Camp to the Queen is given as reward for distinguished service, and these Officers are on duty at Court-ceremonies only within the United Kingdom. About one half of these Aides-de-Camp belong to the militia, to the Yeomanry, or to the Volunteers. 8 Officers on the Active list, and 6 that are not on the Active list are appointed Equerries in attendance on Her Majesty. In addition the military retinue comprises 24 Surgeons and 2 Chaplains, whose posts are honorary, and who have no duties to discharge in personal attendance on Her Majesty.

#### The War Office.

At the head of the War Office stands the Secretary of State for War, who is a Cabinet Minister responsible to the Queen and to the government for the administration of the army. As assistants he has 2 Under Secretaries of State, one "parliamentary Secretary", who is a member of parliament, and represents the administration of the army in the House of Commons, and a permanent Secretary, who is a civilian of high rank. To secure the co-operation of all the branches of the administration of the army a War Office Council has been

formed under the presidency of the Secretary of State of War. It consists of the Parliamentary Under Secretary of State, the Financial Secretary, the Commander-in-Chief, the Adjutant General, the Quartermaster General, and the Inspectors General of Fortification and Ordnance. This council is summoned by the Secretary of State for War, when matters concerning his office are in question. A special office of the Secretary of State for War is the Central Office, under an Under Secretary of State, who is a civilian; it is divided into 4 sections, who discharge the following duties: (1) Registration of the whole correspondence of the War Office; (2) Various affairs of the service which do not concern any other section of the War Office, as well as conducting the correspondence with the General in command of an army in the field; (3) Issue of Service Regulations; (4) Parliamentary business, library, archives, issue of service forms and stationery to the army, and printing. All the personnel engaged in the Central Registry are civilians.

The War Office is divided into two great departments: the military and the financial departments; the former is principally military, the latter almost exclusively civilian. Its chief is the Financial Secretary, who is a member of parliament; the former has no chief, but is managed by the ARMY BOARD, which is presided over by the Commander-in-Chief, and consists of the Adjutant-General, the Quarter-master-General, and the Inspectors-General of Fortification and Ordnance. All questions of general interest, and all promotions of officers of the rank of Major and upwards are submitted to this Board. Every member of it prepares the army-estimates of his own section. Officials from the Treasury, or officers of special experience may sometimes be called in to advise on matters of finance.

The Military Department is divided into 9 sections, whose chiefs are the following Officers:—

- 1. The Commander-in-Chief;
- 2. The Adjutant-General to the Forces;
- 3. The Quartermaster-General to the Forces;
- 4. The Inspector-General of Fortifications;
- 5. The Inspector-General of Ordnance;
- 6. The Inspector-General of Cavalry in the United Kingdom;
- 7. The Chaplain-General;
- 8. The Director-General of the Medical Service of the Army;
- 9. The Director-General of the Veterinary Service of the Army.



Field-Marshal Viscount Wolseley, Commander-in-Chief of the British Army.

I. The Commander-in-Chief, at present Field-Marshal, Viscount Wolseley is in command of every part of the whole army both in the United Kingdom and abroad; he issues all army regulations, and holds inspections. He is the first military adviser of the Secretary of State for War, and is charged with the general superintendence of the military department. He has 4 Aides-de-Camp, and an officer acts as his private secretary. The Military Secretary, the Director of the Intelligence Department, and the Mobilisation Office are directly responsible to him. The Office of the Military Secretary corresponds to that of the Chief of the Military Cabinet of the German Emperor. The Military Secretary has charge of the appointment, promotion, and discharge of officers; also of the selection of officers for the General Staff, and the bestowal of Orders and marks of distinction. He has under him 2 Assistant-Military-Secretaries, one of whom attends to

Indian affairs. A third Assistant-Military-Secretary superintends the examination of candidates for commissions and of officers for promotion, the Administration of military schools and colleges, and the school examination of N. C. Officers and men. The Director of the Intelligence Department (a Major-General) corresponds to some extent to the German idea of the Chief of the Great General Staff, because it is his business to draw up the plans of campaign for the army in offensive and defensive warfare, and to collect information about foreign armies and countries. His office employs 12 officers of the General Staff. He receives all the reports of the 11 military attachés (who all rank as Assistant-Adjutant-Generals) in Paris, Rome, Berlin, Vienna, Constantinople, St. Petersburg, Pekin, Tokio and Teheran, Madrid and Brussels. The Mobilisation-Office employs 1 Assistant-Adjutant-General and 2 other officers of the General Staff, and prepares the mobilisation of the army.

- 2. The Adjutant-General (a General) attends to the discipline, training, and education of Officers and men of all arms; to the patterns of clothing and equipment, to the statistics of the army, the enlistment and discharge of the men, the estimates of the strength of the several establishments, and advises the Secretary of State for War on all matters of his department. He takes the place of the Commander-in-Chief in case of the absence of the latter; his permanent assistant is the Deputy-Adjutant-General. His department is divided into the following 5 sections:
  - I. Organisation under a Deputy-Assistant-Adjutant-General;
  - 2. Recruitment and concerns of the auxiliary forces under the Inspector General of Recruiting (a Major-General) and of the militia, yeomanry, and volunteers with an Assistant and a Deputy-Assistant-Adjutant-General;
  - 3. Discipline and service regulations under an Assistant and a Deputy-Assistant-Adjutant-General;
  - **4.** Artillery matters under a Deputy, and a Deputy-Assistant-Adjutant-General;
  - 5. Engineer matters under a Deputy and an Assistant-Adjutant-General. The two latter have to do with the *personnel* and with the equipment in the hands of the troops.
- 3. The Quartermaster-General (a Lieutenant-General or a General) attends to the provisions, forage, fuel and lighting materials, the quarters, and the remounts of the troops. He superintends the changes of garrisons, the issue of stores and equipments, and looks after the

conveyance of the troops by land and by sea. He administers the Army Service-Corps, as well as the Pay-Department and submits the estimates for his branches of the service to the Secretary of State for War whom he advises on all matters within his own sphere. His department is subdivided into 5 sections, viz:

- I. Barracks and quarters;
- 2. Transports, movements, and changes of garrisons;
- 3. Provisions, forage, &c.;
- 4. Affairs of the Army Service-Corps;
- 5. Remounts.

The first 4 sections employ: 2 Assistant-Quartermaster-Generals, 3 Deputy-Assistant-Quartermaster-Generals, and I Staff Paymaster. The Remounts-section is under the Inspector-General of Remounts, who is assisted by a Deputy-Assistant-Adjutant-General. For the remounts see Section III, Ch. X.

- 4. The Inspector-General of Fortifications (a Lieutenant-General) attends to the building and maintaining of fortresses, barracks, and arsenals, inspects the buildings of the Royal factories or works, sees to the due maintenance of the military railways, and telegraphs, superintends the military lands, the purchase and issue of technical equipment for engineers, and submarine miners. He superintends the appointments of Engineer-Officers to responsible posts within his sphere, as well as the technical training of engineering-troops, and makes all the inspections he considers to be necessary. An Aidede-Camp is his personal Assistant, and his department employs: 2 Deputy and 4 Assistant-Inspectors of fortresses, 1 Inspector, and I Sub-Inspector of submarine mines, I Inspector of iron structures, 7 Junior Officers all belonging to the corps of engineers, and 1 Artillery-Officer as adviser in all artillery-concerns. Questions concerning the equipment of engineers are discussed by the Engineering Committee, consisting of: I President, 8 members, 9 members for special branches of the service, I secretary, and I officer, to superintend all experiments in submarine mines; all the members of this committee are engineers.
- 5. The Inspector General of Ordnance (a Lieutenant-General) supplies the army with arms, equipment and other stores. He decides all questions of armament, examines new inventions, and superintends the inspection of the materials supplied by the works. He administers the Ordnance-department and the Ordnance-corps, submits estimates for the above branches of the service to the Secretary of State for

War, whom he advises on all questions concerning armament, equipment, &c. To this Department, which is sub-divided into 6 sections there are attached I Deputy, 2 Assistant, and 3 Deputy-Assistant-Inspectors of Ordnance. The Inspector General of Ordnance is advised by an Ordnance Committee, whose president is a General of Artillery, its vice-president a naval Officer; its members are: 2 naval Officers, 2 artillery Officers, I Officer of engineers, I Officer representing the branch of Indian ordnance and 2 civil engineers. Its secretaries are: I artillery Officer, and I naval Officer, and there are besides 10 other members for special branches of the service.

- 6. The Inspector-General of the cavalry of the United Kingdom (a Major-General), who has a personal Aide-de-Camp, and an Assistant-Adjutant-General superintends the training and inspects the regiments of the regular cavalry and the yeomanry cavalry.
- 7. The Chaplain General has charge of the *personnel* of the Armychaplains of the Church of England. The *personnel* of the Scotch Church and the Roman Catholic Church is under the control of the Central-Office.
- 8. The Director-General of the Army Medical Department (a Surgeon Major General) superintends the medical corps, and the management of the military hospitals. He is assisted by 4 Surgeons of superior rank.
- 9. The Director General of the Veterinary Department controls the veterinary service and is chief of the corps of veterinary surgeons.

The Army Sanitary Committee is also subject to the military department. Its president is the Quartermaster-General, and it consists of 7 members, of whom 2 are Officers of engineers, and 5 are surgeons; the latter may be either military or civilian, and the committee has also a secretary. It makes reports about construction of new barracks and hospitals, about their plans, and about all questions which concern the medical service.

The Financial Department of the War Office is under the Financial Secretary, who discharges the following functions: (1) He investigates the estimates proposed by the different sections, and prepares the military budget; (2) He examines financially the proposals for new expenditure, and the application of the amounts that have already been voted; (3) He inspects the accounts, the audits, and the settlement of accounts; (4) He administers the ordnance and clothing works, and examines and checks the contracts for supplies; (5) He advises the Secretary of State for War on all matters of finance.

The Department is subdivided into 4 sections: (1) The financial section under the assistant to the Financial Secretary, who is also the Accountant-General of the army; (2) The contract section under the Director of Contracts; (3) The clothing section under a Director; (4) The ordnance-works section under the Director-General of Ordnance Factories. The chiefs of these sections are civilians of high rank, and the *personnel* also is almost exclusively civilian.

The War-Office is in London, and is housed in several buildings. At present plans are being drawing up for a new building with a sufficient number of rooms to accommodate all the sections: The establishment of the War-Office gives employment to 78 Officers of the military department, 4 high placed civilians of the Central Office, and 8 of the financial section, 307 civilian, and 101 military clerks, 66 topographers and lithographers, &c., 90 copying clerks and printers, and 50 door-keepers, messengers, and servants.

To secure the co-operation of the land- and seaforces two committees have been appointed: the committee of home-defence, and that of colonial defence. The former is presided over by the parliamentary Under-Secretary of State for War, and its members are: the first Naval Lord of the Admiralty, the Admiral commanding the naval reserves, the Director of Ordnance, the Director of the naval intelligence department, the Adjutant-General, the Inspector-General of Fortifications, the Inspector-General of Ordnance, and the Director of the military intelligence department. A Deputy-Inspector-General of Fortifications, and a naval Officer attached to the Inspector-General of Fortifications act as secretaries.—The chairman of the committee of colonial defence is the Inspector-General of Fortifications, and its members are: the permanent Under-Secretary of State for the colonies, an official of the treasury, the Directors of the naval and military intelligence departments, the Chief of the mobilisation-office, and an Officer of the staff of the Inspector-General of Ordnance, and an Officer of the staff of the Inspector-General of Fortifications, who acts as secretary. These two committees discuss all the questions of general interest, that concern the defence of the empire.

### The Military Districts.

Excepting the troops in the permanent camps at Aldershot, and the Curragh (in Ireland), the individual battalions, cavalry-regiments, &c. are not in times of peace organised into larger units, but are under the direct command of the Generals at the head of the military districts. Ireland has a Command-in-Chief of her own, but all other Generals Commanding are placed under the Commander-in-Chief of the army, and are responsible to him for the condition of the troops, the armaments, fortresses, buildings, arsenals, &c.; also for the preservation of the stores of provisions, and for the preparations for the mobilisation of their troops. Excepting a few special districts the military districts are divided into infantry regimental districts the commanders of which are responsible for recruiting, control of reserve-men, &c. In all there are 17 military districts, whose names, Head-quarters and distribution are as follows:

North-eastern district (Head-quarter York): Regimental districts No. 5 (Newcastle), 10 (Lincoln), 14 (York), 15 (Beverley), 17 (Leicester), 19 (Richmond), 33 (Halifax), 45 (Derby), 51 (Pontefract), 65 (Pontefract), and 68 (Newcastle).

North-western district (Head-quarter Chester): Regimental districts No. 4 (Lancaster), 6 (Warwick), 8 (Warrington), 20 (Bury), 22 (Chester), 23 (Wrexham), 29 (Worcester), 30 (Burnley), 34 (Carlisle), 38 (Lichfield), 40 (Warrington), 47 (Preston), 53 (Shrewsbury), 63 (Ashton), and 64 (Lichfield).

Eastern district (Head-quarter Colchester): Regimental districts No. 9 (Norwich), 12 (Bury St. Edmonds), 16 (Bedford), 44 (Warley), and 48 (Northampton).

Western district (Head-quarter Devonport): Regimental districts No. 11 (Exeter), 13 (Taunton), 24 (Brecon), 28 (Bristol), 32 (Bodmin), and 41 (Cardiff).

Southern district (Head-quarter Portsmouth): Regimental districts No. 37 (Winchester), 39 (Dorchester), and 62 (Devizes).

Thames district (Head-quarter Chatham): Regimental districts No. 50 (Maidstone). This district includes the fortresses at the mouth of the Thames. South-eastern district (Head-quarter Dover): Regimental districts No. 3 (Canterbury), and 35 (Chichester).

Home district (Head-quarter London): Regimental districts No. 2 (Guildford), 7 (Hounslow), 31 (Kingston), 43 (Oxford), 49 (Reading), and 57 (Hounslow). This district is always under the command of a General of the guards, who also commands the guards.

Woolwich district (Head-quarter Woolwich). This district includes the garrison of Woolwich, and the extensive arsenals, Royal factories, schools, &c., as well as the docks on the Thames, where the troops would embark in case of war.

Aldershot district (the camp and the troops at Aldershot).

Scotish district (Head-quarter Edinburgh). Regimental districts No. 1 (Glencoe near Edinburgh), 21 (Ayr), 25 (Berwick-on-Tweed), 26 (Hamilton near Glasgow), 42 (Perth), 71 (Hamilton), 72 (Fort George), 75 (Aberdeen), 79 (Inverness), and 91 (Stirling).

Jersey district (Head-quarter St. Heliers).

Guernsey (and Alderney) district (Head-quarter St. Peters).

Belfast district (Head-quarter Belfast). Regimental districts No. 27 (Omagh), 83 (Belfast), and 87 (Armagh).

Dublin district (Head-quarter Dublin). Regimental districts No. 88 (Galway), 100 (Birr), and 102 (Naas).

Curragh district (the camp on the Curragh, in the county of Kildare, with the troops encamped there).

Cork district (Head-quarter Cork): Regimental districts No. 18 (Cloumel), and 101 (Tralee).

The troops of the Regulars, who are located in each district are enumerated in Chapter VII.

In the colonies also there are Generals in Command with staffs at Barbadoes (St. Lucia), Jamaica, Halifax (Canada), Bermuda, Malta, Gibraltar, South Africa (inclusive of Natal), West Africa, Mauritius, Ceylon, Hong-Kong, Singapore, as well as in Egypt for the British troops quartered there.

The staffs of the army in India are enumerated elsewhere.

The composition of the staffs of the several districts varies according to their extent, importance and number of troops located in them. The largest and most important districts like Malta, Gibraltar, Aldershot, and the Scottish district are commanded by Generals, others by Lieutenant-Generals, most of them by Major-Generals, and those of less importance by Colonels and Brigadier-Generals. The following compositions of a district staff may serve as examples:-

- I Lieutenant-General, or Major-General as General in command with a personal A. D. C.
- 2 Assistant-Adjutant-Generals 2 Deputy-Assistant-Adjutant-Generals Staff

I Colonel on the Staff for Royal Artillery

- I Officer of the General Staff (Brigade Major) for artillery affairs
- I Commanding Royal Engineer (of the rank of Colonel)

I Inspector of musketry for the infantry

- I Principal Medical Officer (of the rank of Colonel)
- I Officer of the Ordnance Department
- 1 Staff paymaster.

One of the Assistant-Adjutant-Generals is appointed Chief of the General Staff, and the service of the General Staff is divided into two sections: Section A for discipline, training, recruiting, mobilization, &c., and section B for equipment, provisioning, transport, movements of troops, billeting, &c. The Artillery Officer is in command of all the artillery troops of the district, and inspects the armaments of the fortresses. In most of the districts of the United Kingdom there is appointed in addition a Lieutenant-Colonel of artillery for the administration, inspection, &c. of the artillery of the militia and volunteers.

In the camp at Aldershot, which has in addition to the staff of the district, a General Staff nearly twice as large as that above described, the troops are divided into one brigade of cavalry, one of artillery, and three of infantry with a Major-General to each, as well as an Aide-de-Camp and a Brigade Major.

There are also 3 cavalry brigades with headquarters at Canterbury, the Curragh, and Colchester, each with a staff of 1 colonel in command, and 1 brigade adjutant.

In Dublin there is appointed a Commander-in-Chief (at present Field-Marshal, Lord Roberts) for all the troops stationed in Ireland. Under him are the Generals commanding the 4 Irish districts, and he has a staff, as follows:

- 1 Assistant-Military Secretary, and 2 Aides-de-Camp
- 1 Deputy-Adjutant-General

#### General-Staff

- 1 Assistant-Adjutant-General
- 4 Deputy-Assistant-Adjutant-Generals, I of whom is for the artillery, and I for engineers
- 1 Commanding Royal Engineer (of the rank of Colonel)
- I Inspector of Musketry for the infantry
- 1 Deputy Judge Advocate
- 1 Surgeon Major-General
- 1 Ordnance Officer
- 1 Staff paymaster
- 1 Veterinary-Surgeon Lieutenant Colonel.

In all, the staffs of the Commander-in-Chief in Ireland, as well as those of the district of the United Kingdom and the Colonies number: I Field-Marshal, 9 Generals or Lieutenant-Generals, 26 Major-Generals, 37 Colonels, as Brigadiers, 3 Deputy, 30 Assistant, and 72 Deputy-Assistant-Adjutant-Generals, 10 Inspectors of Musketry, 19 Brigade-Majors, 6 Assistant-Military secretaries, 41 Aides-de-Camp, 12 Staff-captains, and 4 Garrison quartermasters, and 270 Officers. There are moreover employed 54 Garrison Sergeant Majors (warrant officers) or Staff-sergeants, 16 interpreters, and 69 waiters or messengers.

# VII. Distribution and Strength of the Army in Peace, and the Army-Budget.

As has been explained in the previous chapter, the troops of the regular army, excepting those of the large permanent camps are not in times of peace organized into larger units, but are under the direct

command of the General in command of the districts. The following table gives the normal distribution of the army in 1898/99, and it is to be observed that it does not comprise the depôts of all arms.

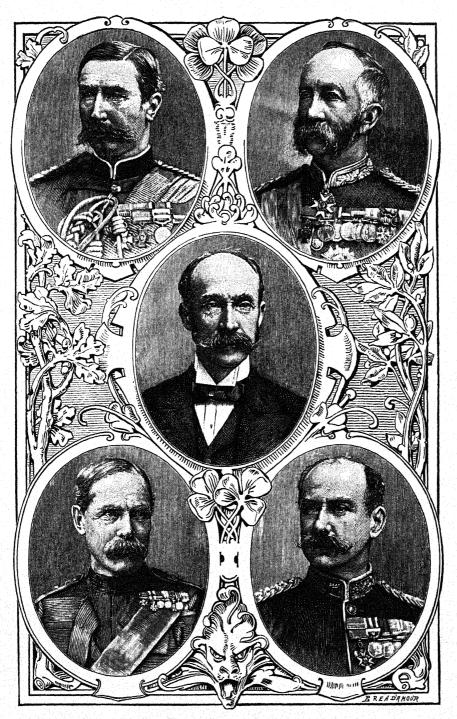
Units	Battali of Infan		Batta O Units Infa		giments Cavalry	В	atteri	es	Garr Artil Cor		Engi Co pan	neer m- ies	y-Service os Comp.
	Brit.	Col.	Re	horse	field	moun- tain	Brit.	Col.	Brit.	Col.	Army- Corps		
In the United Kingdom Punjaub Bengal Madras Bombay Barbadoes (St. Lucia) Jamaica Halifax (Canada) Bermuda Malta Gibraltar Cape of Good Hope and Natal West Africa Mauritius St. Helena Ceylon Hong-Kong Singapore Egypt	78 13 18 10 11 5 3 3 8 1 1 7 3 6 2 1 1 1 1 1 3		19 3 3 2 1 1	10 4 3 2 2 2	57 8 14 8 12 ——————————————————————————————————	1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	46 5 9 4 9 1 1 2 3 9 7 2 1 2 1 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 1 2 1	I I G G G G G G G G G G G G G G G G G G	45 		35		
Total	157	4	31	21	103	10	110	18	61	5	35		

The establishments for 1898/99 enumerate in all 744,697 Officers and men, 60,003 horses, distributed over the different ranks and forces, as follows:

Warra		rummers and	Corporals and	То	tal
Officers Office			Privates	Men	Horses
Regular Army 10,718 122	6 20,835	5045	215,851	253,675	30,095
Army Reserve			<u> </u>	83,050	14,550
Militia 3722 —	2668	58	127,755	134,203	
Yeomanry 686 —	918	220	9900	11,724	11,038
Volunteers 9770 —	14,459	5286	232,530	262,045	4320
Total 24,896 122	6 38,880	10,609	586,036	744,697	60,003

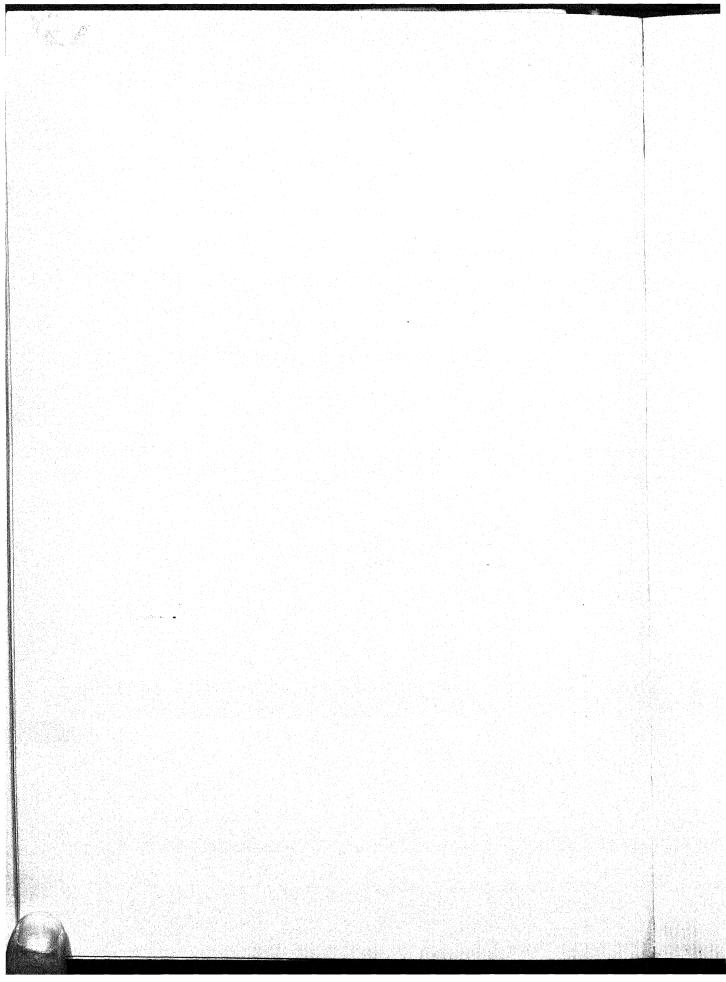
In time of peace there are horsed 718 guns of the regular army, and 400 guns of the volunteers.

The details of the establishments of the regular army, inclusive of the cadres of the non-regular troops, and of the army-reserve are



General Sir R. Buller
Adjutant-General to the Forces
The Marquis of Lansdowne
Secretary of State for War

Major-General Lord Methuen
Commander of the "Home" District
General Sir H. Brackenbury
Chairman of the Ordnance Select Committee



given in the following table, and it has to be noted that in case of war 30,000 men of the militia reserve are available to reinforce the regular army.

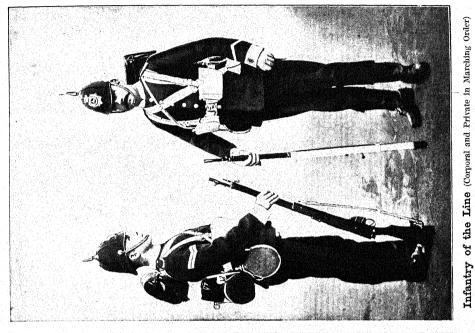
	Officers	Warrant Officers	Sergeants	Drummers and Trumpeters	Corporals and Privates	Total	Horses	Horsed
a. In the United Kingdom and in the Colonies:								
General Staff	342 555 1140 601 3075	35 45 107 120 281	96 1093 2090 1073 5253	177 355 119	6 12083 26761 5834	479 13953 30453 7747 104086	8679 6004 426 1438	328
Army Service Corps Colonial Troops Other troops (Ordnance and Medical Corps)	245 208	152 9 169	562 345	37 115	2807 5888 3166	3803 6565 4787	1311	
Cadres of Militia, Yeo- manry and Volunteers Paymasters	597 209 65	2 	4948 — 5	1214	22 I	6783 209 72		
Military Chaplains Surgeons	87 597 193	1 165	395		136	87 598 891	57	
Total of Regulars in the United Kingdom and in the Colonies	8109	1087	17100	3941	150276	180513	17915	328
b. In India:  Cavalry	261 490 350 1508	18 17 — 104	486 790 3 2343 113	176 - 847	4770 11925 — 48880	5616 13398 353 53694 113	7455 —	 390  
Total in India	2609	139	3735	1104	65575	73162	12180	390
c. Reserves of the Regulars 1st and 2d Class.	-		_		-	83050	14550	
Grand Total of the Regular Army and its Reserves	10718	1226	20835	5045	215851	336725	44645	718

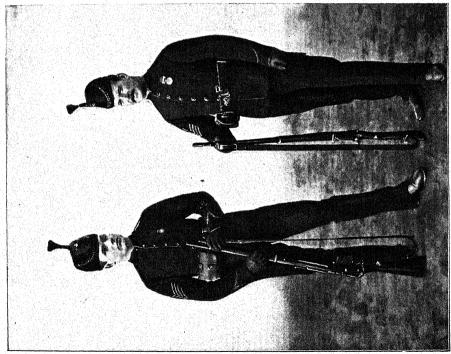
The Establishments of the Auxiliary Forces are as follows:-

	Officers	Warrant Officers	Sergeants	Drummers and Trumpeters	Corporals and Privates	Total	Horses	Horsed guns
a. Militia.  Artillery	521 99 2826 15 54 138 69		360 83 1984 24 42 108 67	- 6 14 36 2	16920 1781 102768 555 964 2556 2211	1963 107578 600 1074		
Total of Militia	3722		2668	58	127755	134203	_	-
b. Yeomanry	686	-	918	220	9900	11724	11038	
c. Volunteers. Brigade Staffs Hon. Artillery Company Cavalry Artillery Engineers Infantry Medical Corps	165 45 22 2060 689 6728			987 313 3949	788 246 41480 13096 175639 1281	300 47246 14948 197018	_	
Total of Volunteers	9770	_	14459	5286	232530	262045	?4320	400
Grand Total of the Non-regular troops	14178		18045	5564	370185	407972	15358	400

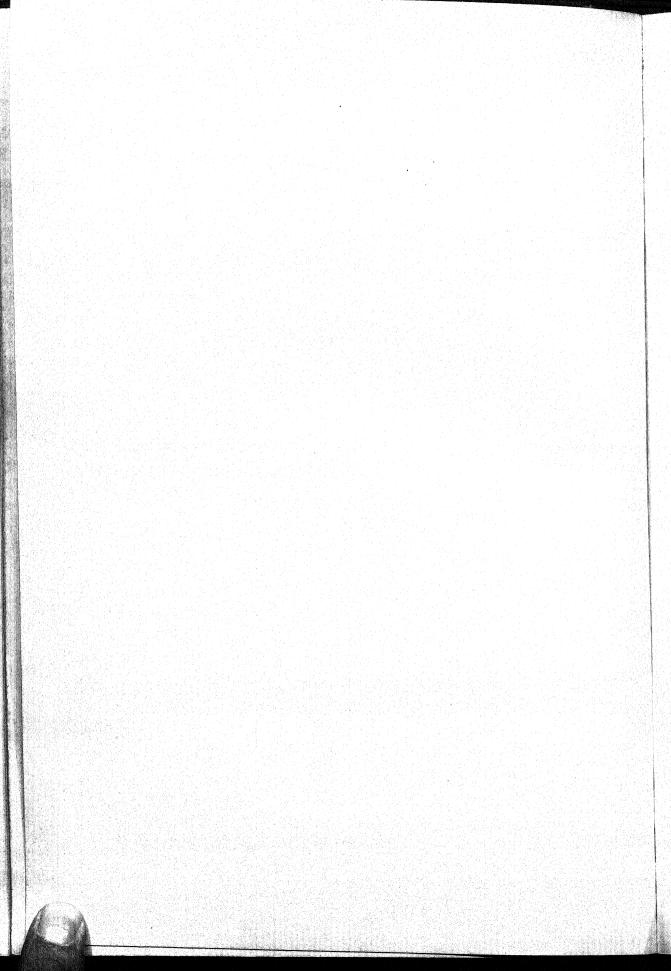
<sup>&</sup>lt;sup>1</sup> Inclusive of 30000 men Militia Reserve.

On the 1st of January 1898 the strength on paper of the regular army exceeded its actual strength by 599 men. The deficiences numbered 383 in the garrison artillery, 111 in the engineers, 706 in the infantry, 179 in the colonial corps, and 46 in the ordnance and pay corps. There were 245 supernumeraires in the cavalry, 514 in the field &c. artillery, 39 in the Army Service Corps, and 28 in the Army Medical Corps. The reservists numbered 82,005 men, and the militia reserve amounted to 29,961 men. At the yearly inspections of 1897 the establishments of the militia were short of 18,914 men, those of the yeomanry 1700 men, and on the 1st of November 1897 the volunteers were short of 30,760 men.





"Riffe-Brigade" (Sergeants in Review Order)



The military budget of the United Kingdom and the Colonies for 1898/99 amounted to:

ı.	Pay of the Regular Army and Reserves of Regulars.	. £6,266,400
2.	Pay &c. of Medical Corps, and hospitals, &c	. £295,800
	Pay of the Militia	
	Pay of the Yeomanry	
5.	Allowances to the Volunteers	. £614,200
6,	Transports and Remounts	. £710,400
7.	Provisions and Forage	. £3,352,600
	Clothing	
9.	Arms and Ordnance	. £1,972,000
	Buildings, military structure, &c	
11.	Education and Training	. £118,200
	Sundries	
13.	War Office Expences	<i>.</i> £245,200
	Total of above.	. £16,139,800
14.	Pensions of Officers	. £1,567,800
	Pensions of men	
16.	Various Pensions	. £177,300
	Total of Pensions.	<i>.</i> £3,080,700
	Grand Total.	. £19,220,500

# VIII. Mobilisation and Organisation of the Army in War.

#### a. Mobilisation.

In consequence of the numerous garrisons abroad, and the consequent frequent changes of garrison the system of mobilisation of the British army rests on different bases from that of all other armies. The troops stationed in India and in the Colonies are, in a manner, on a war-footing even in times of peace, and only require, at the outbreak of war, to be supplied with transport animals, to be mobilised. The "Mobilisation" to be described in this present chapter therefore only refers to those Units of the regular army, militia, yeomanry, and volunteers, which are stationed within the borders of the United Kingdom, and to the formation of depôts, to serve as feeders of the regulars and militia during the war.

In times of peace the registers and lists of the reservists are kept at the depôts of their regiments, and the commanders of these depôts (Regimental Districts) must have in readiness the summonses, railwaytickets, and other documents required for the immediate assembling of their reservists. Twice every year, on June 15th and December 15th the commanders of the troops in active service report to the commanders of the depôts (Regimental districts) the number of reservists required to replace the inefficient, or insufficiently trained, or discharged men, in order to bring their commands up to war strength, and on the bases of these reports the latter draw up their plan of mobilisation, and order the disposal of the army and militia reservists.

Orders of mobilisation are telegraphed by the War-Office direct to the Generals Commanding districts, and also to the Commanders of Regimental Districts. The former communicate these orders to the Commanders of the active troops, who immediately call in all absent Officers and men, and have the *personnel* of their corps medically examined. They then receive from the ordnance depôt of their garrison arms and equipment for the expected reservists, harness for the horses to be brought up, and at the same time they send off detachments to bring them in. The families of the non-commissioned officers and men that are married are conveyed to their homes, and all the inefficient men are transferred to the depôt.

The Commanders of the Regimental Districts publish the mobilisation by posters affixed to the doors of town-halls, churches, policeoffices, barracks, and post-offices, and forward to every reservist the summons together with his railway ticket, and a post office order for 3 shillings travelling expenses to the depôt. This assembling of the reservists at the depôt is for the British army an unavoidable evil, and is to be regarded as a necessary consequence of their dispersal, and of the frequent changes of garrison. If the men were instructed to proceed at once to their several regiments, the press of men travelling under no military command to Ireland or the south of England might become inconveniently great, and moreover mobilisation papers, plans and orders would have to be changed too frequently. In order then to avoid confusion the slower but safer practice of assembling the reservists at the depôts has been preferred. Arrived at the depôt, the men are examined medically, clothed, supplied with minor necessaries, and then forwarded as soon as possible in detachments of 50 to 100 men under the command of an Officer to join their units; then they receive arms and equipment.

The reserve horses are delivered by their owners at various centres (see section III, chap. X), where they are taken over by the Officers in command of the detachments. These Officers bring from their

regiments only halters, snaffle, bridles, and nose bags; the rest of the harness is supplied to the horses as soon as possible after they have joined their regiment. Carts the troops possess even in times of peace.

Officers of the active army, who are employed in several institutions that are suspended in times of war, as well as officers of the reserve-forces are attached by the War-Office to various regiments to bring up the number to the normal establishment.

This is the method adopted to mobilise battalions of infantry, and that for other arms is very similar. The horse- and field-artillery are never without the harness, equipment, and material necessary to place them on a war footing; for the other mounted forces these things are kept at the arsenal-depôts. The reservists of the cavalry regiments of the United Kingdom, of the engineers, of the army service-corps, and of the medical service are not assembled at the depôts but report themselves directly at the regiment to which they belong; men belonging to the cavalry regiments serving in India or in the colonies report themselves at the depôt in Canterbury.

Militia, Yeomanry and Volunteers are mobilised at the head quarters of their respective cadres, and the army-reservists are called in by posters and direct orders. Those units of the militia, which are required for field service, are mobilised to a war strength equal to that of the regulars, but the others to the full strength of the peace establishment; for these men clothes, equipment, and arms are stored with each unit. If mobilisation only aims at the defence of the country, then the militia reservists remain with their militia regiments; but if they are mobilised for a foreign war then they are summoned to report themselves at the depôts of their regiments to be there embodied.

At the depôt of every regimental district a depôt battalion is formed of 8 companies, with which are incorporated all the men of the active army, of the reserve, and militia reserve, that are not attached to any active body of troops. These depôts are the feeders for all the battalions of regulars and militia belonging to the regiment. Similar depôts are also formed for other arms.

As with the exception of the troops in the camp at Aldershot, and those in the cavalry brigades, the individual battalions, regiments of cavalry, batteries, &c. do not form part of any higher units, but are in times of peace directly under the orders of the Generals in

command of Districts, the higher units have to be formed in case of mobilisation. But in consequence of the incessant changes of garrison, this can only be carried out on the basis of garrisons, and not of army-units. Thus, for example, the three cavalry regiments, at present in the camp at Aldershot, form the 1st cavalry brigade; the three battalions in Dover together with one from the camp at Shorncliffe, the 17th brigade of infantry, 9th division, 3d army-corps, and so on. If now a battalion stationed at Dover is to be moved to Ireland, it must from the 17th brigade be incorporated with another, which is formed out of troops garrisoned in Ireland; its place in the 17th brigade is then filled by the battalion which relieved it at Dover. This latter also receives the arms, equipment, carts, &c., which are in store in Dover ready for mobilisation of the battalion there, and it transfers its own stores in the former garrison to the battalion that relieves it.

For every higher unit there is appointed a special place of assembly, and as soon as any body of troops is mobilised, it is systematically sent there. Till the mobilisation is fully carried out the troops remain under the orders of the General commanding the district; as soon however as they leave their garrisons they come under the Commander of their mobilised unit.

# b. The Army in the Field.

For the army in the field there exist two different establishments; one for mobilisation for the defence of the country, and another for mobilisation for war abroad. The difference, however, is but slight, and consists mainly in this, that in the mobilisation for home defence carts and tents are omitted, which for a war in Europe would also probably be left at home. It would lead us too far to enter into details, and we will therefore restrict ourselves to a description of the establishment for a foreign war.

An Infantry-brigade is commanded by a Major-General, who has a staff of 1 Officer of the General Staff, and 1 Aide-de-Camp. To the staff of a brigade are attached 10 military police, 4 men of the field-post, 1 sergeant clerk, 6 servants, and 3 drivers. The brigade consists of:<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> As a detachment from every unit is left at the advanced base of the line of communication the numbers here given do not agree with those of Chapter II. The total strength of these detachments is given in the Army-corps.

	Officers	Warrant Officers and Men	Horses	Cruns	Other vehicles
Staff of brigade	3	24	II		I
Four infantry battalions	. 116	3924	168	4.	40
One Company Army Service Corps	. 5	116	110	-	23
One Company Royal Army Medical Corps	5 3	94	56	-	15
One Field hospital		56	28		6
Total .	. 132	4214	373	4	85

The fighting strength of a brigade consists of 3520 rifles, and 4 machine guns.

A Division of Infantry is commanded by a Lieutenant-General, whose staff consists of 3 officers of the General Staff (I Assistant, and 2 Deputy-Assistant-Adjutant-Generals), 2 Aides-de-Camp, I Assistant Provost-Marshal, 2 Field-chaplains, 2 Surgeons, I signalling officer, 3 clerks, 2 men of the medical corps, 10 mounted military police, 4 men of the field-post, 20 servants, and 12 men of the Army Service-Corps. The strength and composition of a division is as follows:—

	Officers	Warrant Officers and Men	Horses	Guns	Other vehicles
Staff of Division	I 2	55	46		2
Two Infantry brigades	264	8428	746	8	170
One Squadron	6	154	161	_	2
One Brigade Division of Artillery	19	511	409	18	32
One Divisional Ammunition Column	5	201	236		41
Regimental Staff, Divisional Engineers .	2	5	4		
One Company of Engineers	7	205	63	· , `,	11
One Company Army Service Corps	6.	93	87		16
One Field hospital	5	56	28		6
그 병사들이 아니까 [18] 사이트 아이는 나는 사람들이 아니아 아이들이 그 아니는 아이트 살아보다는 생각하다.	326	9708	1780	26	280

The fighting strength of a Division of Infantry consists of 7040 rifles of the Infantry, and 150 of the Engineers; also of 134 sabres and lances with 18 field guns and 8 machine guns.

An Army Corps consists of the staff of the corps, 3 Divisions of Infantry, I cavalry regiment, the staff of the regiment of cavalry the three squadrons of which are attached to the Divisions, the Corps Artillery, the Corps Ammunition Park, the Corps Engineers, I bat-

talion as Corps Infantry (i. e. Infantry at the disposal of the Commander of the Corps), I Company of the Army Service-Corps, I supply park, I field bakery, and I field hospital.

The staff of the corps consists of I General in command of the corps, 7 Officers of the General Staff (I Deputy, 2 Assistant, and 4 Deputy-Assistant-Adjutant-Generals), 3 Aides-de-Camp, I Commandant of Head-quarters, I Provost-Marshal, I Commander of the Artillery (Major-General) with I Officer of the General Staff, and I Aide-de-Camp, I Commander of the Engineers with I Officer of the General Staff, and I Aide-de-Camp, I Director of telegraphs, I Director of signalling, I Field-chaplain, 3 Surgeons, I Officer commanding Army Service-Corps, I Ordnance-officer, 2 Veterinary surgeons. There are also appointed 3 Officers of General Staff for the Intelligence Department with 2 clerks and 6 servants, and there is added to the staff a detachment consisting of I Officer, 16 mounted, and II foot police, 2 Officers, 7 men of the field-post, 17 clerks, 58 servants and orderlies, and 21 drivers. The Corps-Artillery numbers:—

	Officers	Warrant Officers and Men	Horses	Guns	Other vehicles
Staff of the Corps Artillery One brigade division of two horse bat-	2	6	7		1
	14	363	402	12	22
teries	38	1022	818	36	64
Corps troops ammunition column	6	248	304	_	45
Total	60	1639	1531	48	132
The Corps Engineers consists of:-					
	υ.	rt md			SO.

	Officers	Warrant Officers and Men	Horses	Vehicles	
Staff of the Corps Engineers	2	6	6	1	
One Pontoon Company	5	208	186	28	
One Telegraph division	6	238	169	30	
Balloon section	3	51	42	8	
One Field company of engineers	7	205	63	II	
One Railway company	5	153	I 2	1	
One Field Park	I	44	49	II	
Total	29	905	527	90	

The strength of an Army-Corps amounts t	0:-			
Officers	Warrant Officers and Men	Horses	Guns	Other vehicles
Staff of the Army-Corps	137	123	-	7
Three Divisions of Infantry 978	29124	5340	78	840
One Cavalry regiment	506	536		14
Regimental Staff of a cavalry regiment . 7	44	53		8
Corps Artillery 60	1639	1531	48	132
Ammunition Park 20	672	848		119
Corps Engineers 29	905	527		90
Battalion of the Corps Infantry 29	981	42	1	10
One Company of the Army Service-Corps 6	145	174		38
One Supply Park 9	531	749		1.5
One Field bakery 5	312	196		10
One Field hospital 5	56	28		6
Total 1207	35052	10147	1271	1274

Left behind at the Base . . 37 3299 - -

The fighting strength of an Army Corps amounts to:—22,000 rifles of infantry, 600 of engineers, 804 sabres and lances, 102 field- and 25 machine guns.

The brigade is regarded as the highest cavalry-unit. It includes 3 regiments of cavalry, with one battery of horse artillery, an ammunition column, 2 companies of mounted infantry with 2 machine guns, a company of Army Service-Corps, a bearer company, and a field hospital. The staff of a cavalry-brigade consists of I Major-General in command of the brigade, I Officer of the General Staff, I Aide-de-Camp, and I Field-chaplain with 5 mounted military police, and 2 men of the field-post, 8 servants, I clerk, and 3 drivers.

The brigade numbers:—	Officers	Warrant Officers and Men	Horses	Guns	Other vehicles
Staff of brigade	4	19	22		1
Three Regiments of Cavalry	75	1518	1608	3	39
One Battery Horse Artillery	6	176	195	6	11
One Ammunition Column	4	106	105		18
Two Companies mounted infantry '.	12	294	310	2	9
One Company of Army Service-Corps	5	120	124		26
One Detachment of the Army Medical Corps	3	94	56		15
One Field hospital	5	56	28		6
Total.	114	2383	2448	11	125

<sup>&</sup>lt;sup>1</sup> Includes 25 machine guns.

# c. Ammunition, Rations and Forage Carried.

The number of rounds of artillery ammunition carried in the various lines of supply with an army in the field are as follows:—

various lines of suppry w	itii aii	allily 1.	In the		the	
		With the Battery	Ammuniti Column	on Amm	unition	In all
12 pr. guns of Horse Artil	lery:					
Shrapnels		134	95		59	288
Case		8	4		3 ,	15
15 pr. guns of Field Artille	ery:					
Shrapnels		142	74		7.3	289
Case		8	4		4	16
The number of cartride	es fo	or small	arms is a	as follow	s:	
			Battal. &c.			
	by an			nal itio	e itio	
	n ed	uni car	ag age gor	sio un un	In the nmuniti Park	E III
	Carried by the man	n t	In the Baggage Waggon	CHAT	In In	In
Per rifle:	Ü	In the Ammuni- tion cart	Ba	In the Divisional Ammunition Column	In the Ammunition Park	
Infantry	100	77		77	55	309
Mounted Infantry	100	130	_	56	76	362
Engineers	50	e jaya <del>n</del> ya	50	30	30	160
Per carbine:						
Cavalry	30	2 I		25	3	79
Artillery	20			20	20	60
Mounted Engineers.	50	-	50	20	20	140
Army Service-Corps.	20		-	10		30
Per revolver:						
Infantry	12	I 2	-	12		36
Cavalry	I 2	I 2	12	<del></del>		36
Artillery or Engineers	12		12	12	_	36
Per Machine-gun: Wi	ith the	gun				
Infantry	4000	6600		8800	9000	28400
Mounted Infantry	3500	17600		13200	11000	45300
Cavalry	3500	17600		13200	11000	45300

The following are the rations for Officers and men, which are carried by the troops themselves, or in the Supply-columns of the 1st line:

10 mic.	Field Ration	Grocery Ration	Emergency Ration
By the man himself	$\frac{I}{2}(a)$		Ī
In regimental supply waggons for issue on			
arrival in camp	1	ı (b)	
In regimental baggage waggons		ı (b)	김 교내는 이번
In the supply column 1st line to replace			
the previous ration	Ţ	1	1 (c)
Total.	2 <u>I</u>	3	2

NOTES: a. The remnants of the rations of the previous day;

- b. Packed in panniers to facilitate the distribution;
- c. The carts carrying these rations are kept together as a special section of every supply coloumn.

The supply columns of the 1st line are formed from the companies of the Army Service-Corps, which are attached to the Brigades, Divisions, and Army-Corps. The supply columns of the 2nd line consist of a supply park with hired transport which carries 3 days' supplies for the Army Corps.

The forage rations which are carried for each draught- saddle- or packhorse with the troops or in the supply columns of the 1st line are as follows:—

	Oats	ration
On the horse		$\frac{1}{2}a$
In regimental supply waggons for issue		
arrival in camp		I
In every supply column of the 1st line	to	
replace the above ration	• •	r
Total		$2\frac{1}{2}$

NOTES: a. The remnants of the rations of the previous day;

b. Each waggon of 2nd line regimental transport and of supply columns carries 1 bale (80 lbs.) of patent forage as a reserve for its own draught horses.

In the supply waggons with the troops, and in the supply columns of the 1st line FUEL for the current day is carried at the rate of 1 lb. per man for issue on arrival in camp, and 1 lb. to replace issues.

#### d. Lines of Communication of an Army in the Field.

A General, assisted by his staff, is in command of all the Lines of Communication of an army in the field. His quarters are usually at the chief base on the line of communications, and all officers and troops employed on the line of communication are under him. Staffs are also installed at the advanced base, at the chief base, and at all the stations on the line of communications. At the base on the line of communication a depôt battalion is formed for each army-corps for all men sent to the rear, and a remount depôt with 350 saddle-horses, and 650 draught horses, as well as a permanent hospital with 520 beds. At the advanced depôt is a remount depôt for 300 horses, and a stationary hospital with 100 beds. The number of companies

of the Army Service-Corps, of the detachment of workmen, of the columns of hired or requisitioned vehicles, depends on the nature of war and is determined by circumstances.

## e. Organisation of the Army in the Field.

Three army-corps and four brigades of cavalry are mobilised for the defence of the country. These are composed exclusively of regulars. The Yeomanry cavalry brigade is attached to the Divisions of Infantry. From a part of the brigades of Volunteer Infantry, and the position-batteries of Volunteers, an army of the 2nd line is formed for the defence of the intrenched positions round London. The army for garrisons is formed from the remaining troops of Regulars, Militia, and Volunteers, and are distributed among the fortresses and harbour defences.

For a foreign war there are available in the United Kingdom, and in the colonies in round numbers (1st January 1898):—

As in former wars, so also now the voluntary service of the militia as garrison troops in the colonies can be relied upon; accordingly the battalions of infantry in garrison in the Mediterranean, as well as those in garrison in the fortresses at home, are available for foreign wars, and thus it is possible to set free from home three army-corps and four brigades of cavalry for an expedition beyond the seas. Such a force would amount in all to 75 battalions, 54 squadrons, and 55 batteries with 330 field guns, making in all some 130,000 men, exclusive of the troops of the line of communication. For these latter about 20,000 men would be available, leaving still for the garrisons at home and in the colonies, and in the depôts 120,000 Regulars, and 90,000 militia men.

## SECOND SECTION.

# I. Arms of the troops.

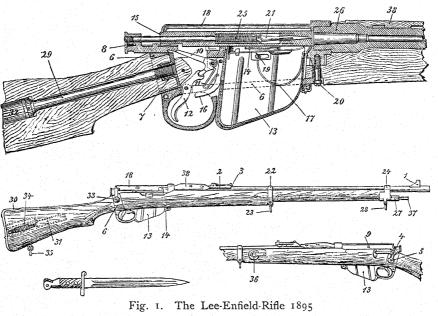
## a. Infantry.

A FTER the successes gained by the Prussian troops armed with the needle-gun in the Danish war of 1864, steps were speedily taken in Great Britain to produce a breech-loader, by adapting the Enfield rifle, at that time the weapon of all the infantry, and fitting it on the Snider system with a lock à la tabatière. This adapted rifle with a calibre of 580 proved very efficient, but the progress in the manufacture of fire arms in 1877/78 necessitated its being replaced by the Martini-Henry rifle with a calibre of 450. Soon the Martini-Henry rifle had to give way to a magazine-rifle of small calibre, and the Lee Metford Magazine with a calibre of 300 was introduced in 1888. The first pattern of this rifle revealed some defects, and therefore a second pattern was introduced in 1895, the "Metford" barrel with 7 grooves was superseded by the Enfield barrel with only 5 grooves.

The Lee-Enfield rifle 1895 (see fig. 1) is a breach loader with bolt lock and detachable magazine for 10 cartridges. The barrel is made of steel and has 5 grooves with twist towards the left of one turn in 33. A jacket for the barrel such as the German rifle has does not exist, but the back-part of the barrel is cased in wood, so that the left hand of the rifle-man can keep its hold of the weapon even in the hottest magazine-firing.

The sighting apparatus consists of a backsight with bed and leaf; the former graduated for distances up to 200 yards, the latter with a slide graduated for distances between 600—1800 yards, and marked also for 650 and 750 yards, and so on.

For distances between 200 and 600 yards the leaf is not raised, but the slide is moved along the phlanges of the back sight, which

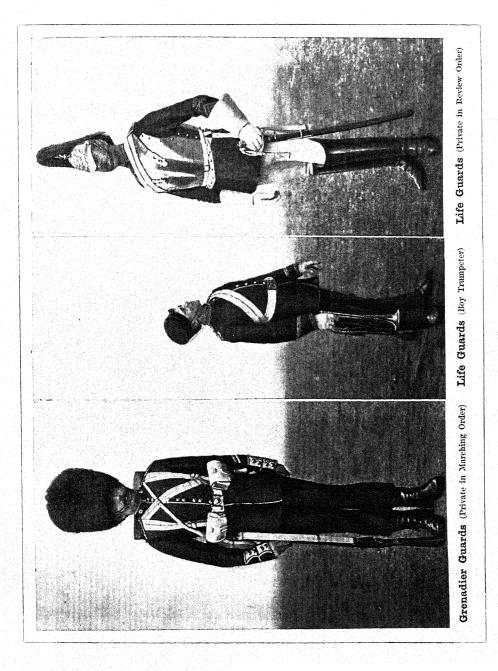


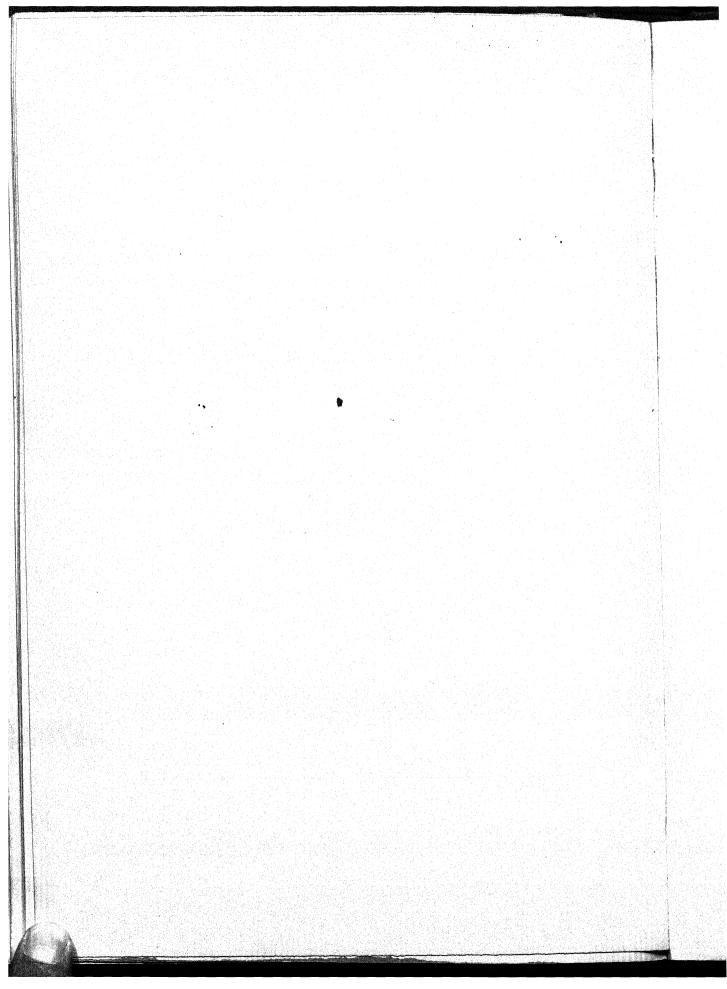
Ι.	Foresight	14.	Cut off	27.	Bayonet catch
2.	Bed of Backsight	15.			Piling swivel
3.	Leaf of Backsight	16.	Magazine Catch	20.	Butt bolt
4.	Aperture backsight	17.	Magazine Spring	30.	Butt plate
5.	Screw for ditto	18.	Body	31.	Oil bottle
6.	Cover	19.	Magazine platform	32.	Butt bolt head
7.	Butt bolt screw	20.	Connecting screw	33.	Bolt knob
8.	Cocking piece	21.	Striker	34.	Pull through
9.	Screw Ejector	22.	Lower Band	35.	Butt swivel
TO.	Sear	23.	Lower band swivel	36.	Dial-Sight
II.	Sear Spring	24.	Upper Band	37.	Cleaning rod
12.	Trigger	25.	Main Spring	38.	Hand guard,
13.	Magazine	26.	Chamber	Ž,	a a Filipina

are marked for 300, 400, and 500 yards. The phlanges slowly rise, so that the head of the leaf is gradually raised. For distances of 1600 to 2800 yards there is on the left side of the rifle a dial-sight placed below the lower band with an aperture sight on the left side of the bolt cover.

The lock consists of a metal case, the sear, the body, and the bolt, which can be turned to the right or left, and moved backwards or forwards by means of a knob on the right side. To open the lock the knob must be raised and the bolt drawn backwards, the resisting shoulder on the body preventing its being drawn too far back. At the lower end of the bolt are the striker and mainspring.

The magazine is made of steel, and contains 10 cartridges in 2 rows. It is removable, and can be placed ready loaded into the case. If the magazine is placed in the rifle, it can be shut off by a





cut off, and then the rifle can be used as an ordinary single loader. When all the cartridges in the magazine have been used, it can either be filled again, or it can be allowed to drop out, and a new one introduced. The Bolt mechanism acts as follows: By lifting the knob, the bolt is turned to the left, thereby liberating the striker from the cap of the cartridge previously fired. In drawing back the bolt the empty cartridge is ejected backwards towards the right, and is replaced by a new one, withdrawn from the magazine. By pushing the bolt forward again the cartridge is forced into the chamber of the barrel, the sear holds the striker stationary, and compresses the mainspring. When the knob is pressed downwards towards the right, the bolt closes the lock; by pressing the trigger the striker is set free, and the cartridge is fired.

The butt of the rifle is hollow, and contains an oil flask, and the cleaning apparatus.

The bayonet is double-edged; it weighs 15 oz., is  $16\frac{11}{16}$  inches long, and has a wooden handle; it is fixed below the muzzle.

With an empty magazine, and without the bayonet the rifle weighs 9 lbs. 4 oz.; its length without the bayonet is 4 ft. 1.85 in., and with the bayonet 5 ft. 1.45 in. The initial velocity is 2000 F.S. (feet per second), for the first 500 yards it is 1500 F.S., and the furthest range is 3500 yards. The following thicknesses of material are usually necessary to stop the Lee-Enfield ballet: an old brick-wall, 9 inches; a wall of sun-dried bricks, 14 inches; oak timber 27 inches, and a mound of clay, 48 inches.

The cartridge (see fig. 2) of the Lee-Enfield rifle has a brass central fire case, and is charged with 30 grains of cordite, a smoke-

less compound of nitrocellulose and vaseline. The bullet is made of hardened lead, encased in copper nickel, and weighs 215 grains. The whole cartridge weighs 415 grains.



Fig. 2. Ball Cartridge.

The Martini-Henry rifle, which was the arm of the infantry up to 1888 (see fig. 3), is a single loader with a block action; the lock is opened by pressing a lever underneath. The mechanism is evident from the diagrams. These rifles are being fitted with new barrels with 5 grooves on the Enfield system with a calibre of 303, thus making them adaptable to the Lee-Enfield cartridges. This adapted rifle is called the Martini-Enfield rifle, and is shortly to be issued

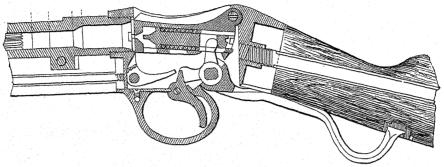
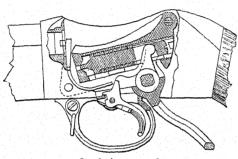


Fig. 3. The Martini-Henry rifle. Ready for firing.



Lock is opened.

to the Indian troops. For this rifle the old three-edged bayonet has been retained. Without the bayonet it is 3 ft. 10 in. long, and weighs 8\frac{2}{3} lbs. In efficiency it is equal to the Lee-Enfield rifle.

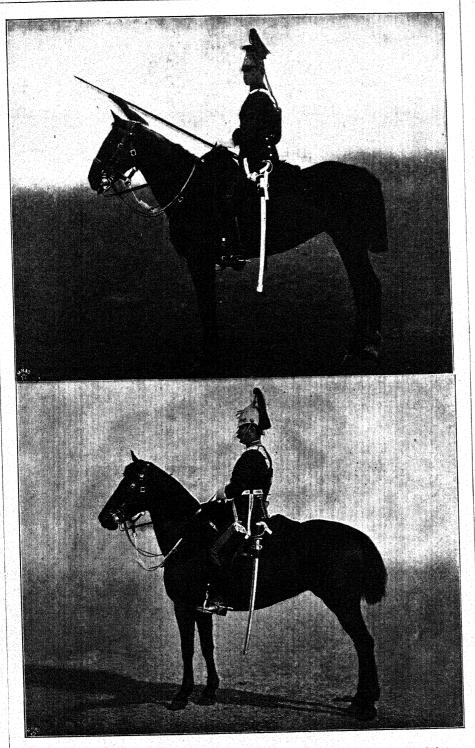
The revolver (system Webley) contains 6 chambers in

the cylinder, which revolves vertically on a joint pin in a bracket under the barrel. After firing, the barrel of the revolver is pressed downwards, and the empty cartridge cases are removed by an ejector, which is moved round the axis of the cylinder by a spiral spring. The revolver weighs 2 lbs. 3 oz. The calibre is '441 inches.

### b. Cavalry.

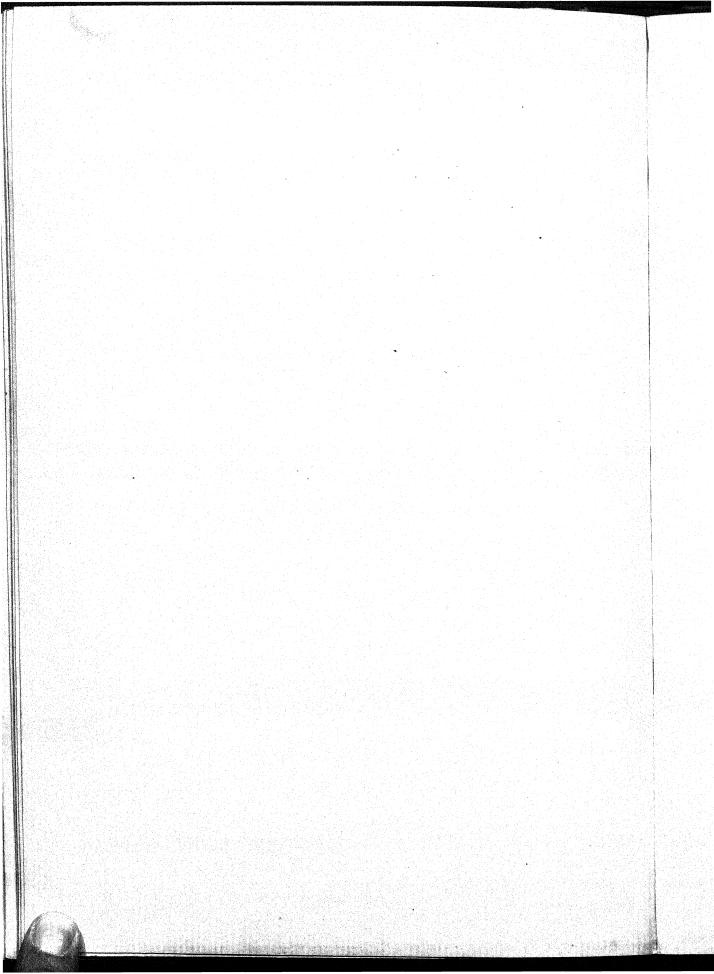
The cavalry sabre in use in all the regiments, except the guards, is slightly curved, and suitable for both cutting and thrusting. The arm weighs nearly 2 lbs., and the length of the blade is 32½ inches. The scabbard is of steel, fitted with two immoveable rings fixed opposite each other on the rear edge. To these rings the straps are buckled, when the cavalry soldier is on foot. On horseback the sabre is fastened to the left hand shoe case. The regiments of the guards use sabres, which are somewhat longer, and heavier than the sabres of the cavalry regiments.

The head and shoe of the lance is of steel; the shaft is of bamboo or ash; the latter only with the new arm introduced in 1894. The



1. Lancer (Private in Review Order)

2. Dragoon Guards (Sergeant in Review Order)



lance is 9 ft. long, and its weight varies between 4 lbs. for bambooshafts, and  $4\frac{1}{2}$  lbs. for ashen shafts. The pennon is red in the upper, and white in the lower half.

The Lee-Metford carbine, with which the whole cavalry is armed is a breech-loader, whose construction is nearly identical with that of the Lee-Enfield rifle, the only difference being that the barrel with 7 grooves of the Metford system has been retained. The knob of the bolt is curved downwards, the wooden hand guard (removable) covers the barrel from the upper ring as far as the foresight, and there is no sighting for firing at long range. The magazine is smaller than that of the infantry rifle, and has room for only 6 cartridges. Rings for straps are fixed on the right side of the butt, and the stock. The leaf of the back sight is arranged as with the rifle for firing at a distance of 500 yards, and is marked for distances of 50 yards between 600 and 2000 yards. The cartridge is identical with that of the infantry-rifle; the length of the barrel is 20\frac{3}{4} inches, that of the carbine 40 inches, and its weight is 7 lbs. 7 oz. The carbine is carried in a case on the right of the saddle.

The Martini-Henry carbine has been fitted with the Enfield barrel just as has been done with the Martini-Henry rifle. The carbine thus converted is called the Martini-Enfield; it is the arm of the Yeomanry cavalry. It is a single-loader; it is  $37\frac{3}{4}$  in. long, weighs 8 lbs., and is adapted for the ordinary cartridge.

The revolver of the cavalry is the same as that for the infantry.

## c. Field-Artillery.

The field-artillery is armed with the 15 pounder breech-loader gun, which was in 1895 formed out of the 12 pounder gun. The tube (see fig. 4) is of steel, and consists of the inner tube, and a jacket

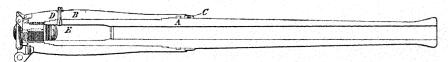


Fig. 4. 15 pr. breech-loader tube.

A Inner tube. B Jacket. C Screw. D Vent. E Cartridge chamber.

with trunnions which is prolonged at the breech to receive the screw. The touch-hole leads vertically through the jacket and inner tube. The tube has 18 grooves with a progressive twist. The calibre is

3 inches; the length of the tube is 71.6 inches, that of the bore from the front of the breech to the muzzle is 7 ft.; and of the chamber it is 11 inches; its diameter is 3.625 inches.

The sighting apparatus consists of a foresight on each side with corresponding back sights. On the latter the elevations for each 25 yards are indicated by notches up to 5100 yards. When firing at great distances, or in foggy weather, or at objects not easily visible, telescopic sights are fitted on.

The breech-block (see fig. 5) is constructed on the well-known De Bange system, and consists of a breech screw with steel mush-

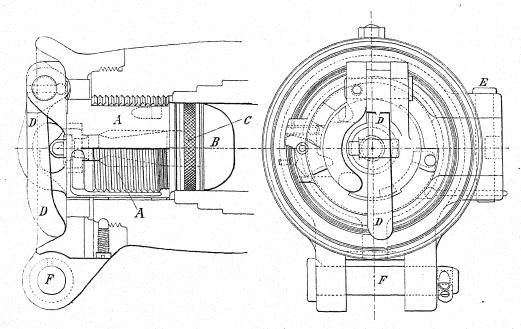


Fig. 5. Breech of 15 pounder Field gun.

A Breech Screw. B Mushroom head. C Asbestos pad. D Cam lever. E Hood Screw.

F Elevating bolt.

room head and asbestos pads, and a cam lever. The thread of the screw is interrupted in three places, corresponding to similar smooth spaces in the screw on the jacket. To open the lock the lever is raised, and the screw of the lock is turned one sixth to the left, then drawn back, and opened like a door at the hinge. Inclusive of the lock the gun weighs 780 lbs.

The gun carriage is made of steel, and consists of two side brackets,

which are connected by stays, and a trail eye and a steel axle with 2 wheels each having a diameter of 5 ft. Two transoms bolted between the brackets, and the axle secure the rigidity of the gun carriage. The trunnions of the gun do not rest directly on the brackets, but on a so-called moveable "cradle", which consists of a top carriage pivoted on the axle tree. This top carriage is supplied with a hydraulic buffer with a double spiral spring, the latter being made fast in front to the axle, the former under the back part of the gun. When the gun is fired the buffer and the cradle permit a recoil of about 4 inches, thus reducing the force of the concussion upon the gun-carriage. The elevating gear consists of a double screw at the right hand side of the gun-carriage, fitted with a hand wheel, and fixed to the top carriage. On each side of the gun-carriage there is a shell pocket containing 2 shrapnel, 1 case-shot, and 3 cartridges. To diminish the recoil two brake shoes fastened with wire-ropes to the arms of the axle, and to the brackets are placed on the ground underneath the wheels. A third shoe is used as a brake on the march. A wooden handspike is used for traversing as well as loading. Over the axle there are 2 seats with supports for back and arms, and foot rests. The weight of the gun and gun-carriage amounts to 2015 lbs., the greatest angle of elevation of the gun is 160, and of depression is 5°, and the height of the trunnion axle above the ground is 3 ft. 6 in.

The guns fire shrapnel, shell, and case-shot. The former are made of steel with copper driving band, and an explosive charge (of 1½ oz. of black powder) at the bottom. The projectile contains 200 bullets, and together with charge and fuse it weighs 14 lbs. Its body is painted black, and the head red. The case-shot consists of metal sheets with zinc lining; it contains 314 bullets and weighs 13 lbs. very nearly. The charge of the gun is 1 lb. of "cordite." The fuse is double, and can accordingly be used as a time or percussion fuse. It is made of brass, and when at rest it burns 13 seconds.

The limber has a wooden ammunition box with two lids, which open at the back towards the limber-hook. The shot is conveyed standing upright, the bottom is kept in place by framework of aluminium, and the heads by wooden frames. In the limber there are stowed away 38 shrapnel, and 2 case-shot with 40 charges for the gun.

The weight of gun and limber, packed for marching order, amounts to 4136 lbs.

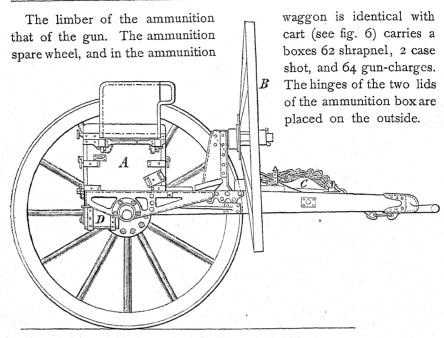


Fig. 6. 15 pr. ammunition cart (without right hand wheel).

A Ammunition box. B Spare wheel. C Drag shoe. D Grease-box.

The greatest initial velocity of the projectile is 1546 ft., the furthest range 6000 yards, and that of shrapnel with time-fuses 3400 yards.

Here follow a few examples from the range table:-

e	on SS)	ent	5 min. elevation or depression alters point of impact laterally or vertically Range		ing ty s)	flight ds)	50 % of hits require a target		
Range in yards	Elevation (degrees)	Slope of Descent			Remaining velocity (yards)	Time of fli (seconds	Length (yards)	Breadth (yards)	Height (yards)
			yards	yards		Ĥ	10	m C	
1000	I° 20'	1:33	1*45	48	1200	2.42	23	0.24	0.69
1500	2° 14′	1:20	2.18	43	1076	3.75	24	1.08	1.5
2000	3° 15′	1:13	2.01	38	997	5.20	25	1'43	1.9
2500	4° 24′	1:9	3.63	35	935	6.72	25	1.14	2.6
3000	5° 43′	1:7	4.36	30	880	8.40	24	0.89	3.2
3500	7° 14′	1;5	5.09	28	830	10.52	29	1.61	5*4
4000	8° 54'	1:4	5.81	25	786	12.22	41	2.61	9.7
5000	12° 40′	1:3	7*27	21	705	16.45	32	3.40	11.0



The Horse Artillery are armed with 12 pr. breech-loaders. The gun (fig. 7) is of steel, and consists of an inner tube with steel-wire coil, and a jacket with trunnions. The inner tube has 18 grooves with progressive rifling. The calibre is 3 in., length of gun is 5 ft. 6 in.,

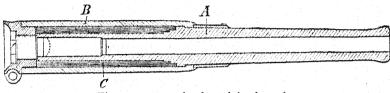


Fig. 7. 12 pounder breech-loader tube.

A Inner tube. B Jacket. C Steel-wire coil.

of bore from the breech to the mouth is 59 in.; the length of the chamber is 9.05 inches, and its diameter is 3.2 in. The sighting apparatus and the lock are identical with those of the 15 pr. guns with this difference, however, that the sighting is arranged for distances not exceeding 4000 yards, and the touch-hole, instead of passing vertically through the jacket and inner tube goes through the axis of the breech screw. A special contrivance prevents the gun being fired ere the locking is completed. Gun and breech-lock weigh 678 lbs.

The construction of the gun-carriage is the same as that of the 15 prs., but there is no top carriage with cradle, buffer, spring, and axle seats. The trunnions of the gun rest on supports on the brackets of the gun-carriage; the elevating screw is fitted to the gun direct. Gun and carriage weigh 1290 lbs.; the greatest angle of elevation is 16°, of depression 8°, and the height of the trunnion axle above the ground is 3 ft. 6 in.

The shrapnel projectile is shorter than that of the 15 pr.; it contains 156 bullets, has a charge of 517 grains of black powder, and weighs with charge and fuse 12½ lbs. The case shot is the same as that of the 15 pr.; the charge of the gun (cordite) is 12 oz.

The limber is lower than that of the field batteries, no seats being required for the men working the gun, but otherwise it is of similar construction; it contains 42 shrapnel, 2 case-shot, and 44 guncharges. The ammunition box is fitted to carry 46 shrapnel, 2 case-shot, and 48 gun-charges.

Gun and limber in marching order weigh 3355 lbs.

The initial velocity of the projectile is 1548 ft., the furthest range is 5500 yards, and that of a shrapnel with time-fuse 3700 yards.

The artillery introduced for the howitzer batteries is a steel howitzer, having a calibre of 5 inches, a weight inclusive of lock of 1066.69 lbs., and a length of 3.72 ft. The howitzer has the De Bange lock with central fire, and fires steel shells (weight 49.83 lbs., charge 4.48 lbs.), filled with Syddite shrapnels (weight 48.73 lbs., containing 372 bullets with an explosive charge of 1749 grains), and case shot (433 bullets, weight 48.73 lbs.). The gun-charge consists of 5.152 grains of cordite.

The mountain-batteries have a 7 pr. muzzle-loader screw gun = with a calibre of 2.5 in. The two parts (fig. 8) are carried separately by mules, and screwed together for action. The front part weighs = 198.323 lbs., and the back part 200 lbs. The gun is made of \_ steel, and is rifled in 8 grooves with progressive curves; the trunnion ring is made of wrought iron. The gun, when screwed together, is 5 ft. 9 in. long. The gun-carriage, when unscrewed, consists of the body of the carriage, axle and wheels, which are carried on the march by three = mules. The recoil is prevented by the wheels being fastened to \_ a hook at the back of the carriage; the elevating apparatus consists of a wedge with screw. The projectiles are shells (weight complete 7.6 lbs., charge of powder ‡ lb.), shrapnel (weight 7.6 lb.,

6·3 in. Howitzer	66 in. Howitzer	8 in. Howitzer	40 pounder Gun		HOWICZEI	Name of Gun or	
6:3	6.6	8	4.67	inches		Calibi	·e
2011.7	4023'4		3912	lbs.	of Gun	Weigl	nt
4.6	7.4	9.25	9.84 8.04	ft.		Lengt	.h
749	836.78	953.4	1421	ft.	7	Initial /elocity	,
4.235—2.49	836.78 4.983—1.99	953.4 11.460—3.487 179.39 25.84	6.725 4.484	lbs.		Gun-charge Blackpowder	
69.76 9.22	99.66	179'39	42.2 24.88	lbs.	COI	eight mplete	Shel
9.22	6.24	25.84	3.357 1.833	lbs.	Explosive charge		ell
69.76	99.66		42.97 24.9	lbs.	CO	eight mplete	
69:76 6997	9402	13993	1312	grains	Explosive charge		Shrapnel
158	252	546	158	)	h b	No. of ullets	
49.74	99.66	73.74	37'97 24'16	lbs.	v	Veight	Case-Shot
50	-224	75	405 245			No. of ullets	Shot
(with buffer)	4246.88 (with buffer)	4917:44 (with buffer)	2604.36	lbs.		of Gun-Carriage	Weight

explosive charge 220 grains, 100 large, and 11 small bullets), and case shot (weight 6.7 lbs., 159 bullets). Gas-checks screwed to the

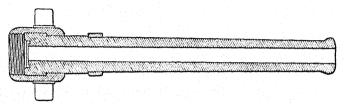
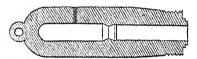


Fig. 8. 7 pounder muzzle-loader screw gun. Front part.

bottom of the projectile serve as a driving band. The gun-charge consists of 6 oz. of black powder. The projectiles are packed in cases each containing 8 shot, and carried by mules, each loaded with



Back part.

2 cases. For each gun 24 common shell, 60 shrapnel, 16 caseshot, and 3 star shell are carried. The initial velocity of the projectile is 1436 ft., the longest range is 4000 yards, and 3400 yards for shrapnel with time-fuses.

The artillery carbine is a single loader (on the Martini-Enfield system) adapted to the ordinary small calibre cartridge. With it the Field artillery uses the infantry bayonet.

# d. Garrison Artillery.

The garrison artillery is trained for service with siege, fortress and coast guns.

A siege-park consists of a number of artillery-sections, which are designated according to their composition as "Heavy", "Middle", or "Light." A heavy section comprises 4 40 pr. guns, and 10 8 inch howitzers; a middle section comprises 6 40 pr. guns, and 10 6.6 howitzers; a light section comprises 8 25 pr. guns, and 8 6.3 howitzers. Every section possesses 35 carts for the transport of the ammunition, and is manned by four companies of garrison artillery. The guns and howitzers are all muzzle-loaders. For the most important data concerning them see the accompanying table p. 130. A new matériel consisting of breech-loading 4 inch and 5 inch guns, and 6 inch howitzers has been tentatively introduced, but the new regulations (1896) for the service of siege artillery refer exclusively to the old matériel.

The construction of the gun-carriage, of the top-carriage, and elevating apparatus is shewn by figure 9, which represents a 25 pr. gun with gun-carriage.

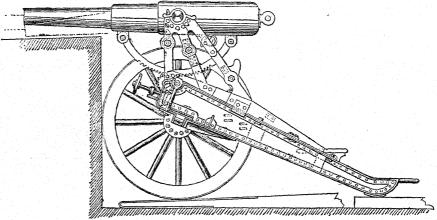


Fig. 9. A 25 pr. siege gun. (Without left axle-arm and left wheel.)

For fortification and coast defence the British garrison artillery is still armed to some extent with muzzle-loaders, but these are being gradually replaced by breech-loaders. The following table gives the principal data of the modern guns for fortress and coast-defence (breech-loaders, on the De Bange system).

Name of gun	Calibre	Nett Weight	e Length	Mean Weight of projectile	Explosive charge of shell	Complete charge of gun	Initial Velocity	Extreme range recorded
	in.	lbs.	ft.	lbs.	lbs.	lbs.	ft.	yards
4 Inch Model VI	4	2913.68	10	24.92	3.18	11.96	1895	7679
5 Inch Model V	5	4470.4	11.24	49.83	7.7	15.42	1745'4	8676.7
6 Inch Model VI	6	11176	14.42	99.66	9.77	47.8	1954.7	9995.6
8 Inch Model VIIA .	8	26822.4	17.92	209.3	18.44	89.7	1994.7	7996.5
9'2 Inch Model VII.	9.2	49174'4	25.43	378.7	30.27	165.4	2059.7	9995.6
10 Inch Model IV	10	64820.8	28.53	498.3	37.62	251.13	2034.64	9995.6
12 Inch Model VII .	12	102819	33.96	711.57	78.73	271.99	1909	9995.6
13.5 Inch Model IV.	13.2	149758	38.23	1245.75	84.71	627.86	2010.7	12000
16.25 Inch Model I .	16.22	248107	43.66	1793*88	180.84	956.74	2081.2	12000

All these guns fire common shell, shrapnel, Palliser-shot, and case-shot.

#### e. Machine-Guns.

The machine-guns are the well-known Maxim-guns, and need not be described. They are sighted up to 2500 yards. The nett-weight of the gun is 59.8 lbs. Their gun-carriage alone is peculiar. The gun-carriage of a cavalry machine gun (fig. 10) is like a limber, and is drawn by 2 horses. The gun rests upon a socket (1), which can be turned in every direction by means of a handwheel (1).

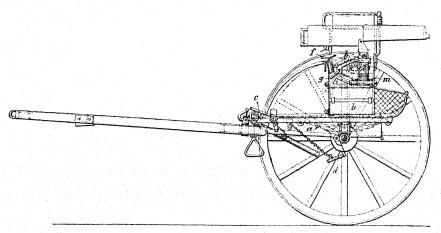


Fig. 10. Gun-carriage of a cavalry machine gun.

a Carriage spring. b Frame work, c Seat, d Foot board, c Top carriage. f Elevating gear, g Handle for clamping. h Handwheel. c Curved base plate. l Socket. m Bracket.

The gun can also be turned vertically on the base plate (i), and can be fired either with the horse in the shaft, or with the latter resting on the ground. The man who aims and fires the gun is seated on the seat (c), his feet resting on the foot-board (d). In the ammunition boxes (b) there are stowed for use 14 cartridge cases, each containing 250 cartridges on a belt ready for firing. The wheels are 4 ft. 8 inches in diameter, and the axle of the carriage is 5 ft. above the ground; without the gun and ammunition the carriage weighs 978 lbs. Two men can sit on the ammunition boxes near the gun.

The carriage for the infantry machine-gun (fig. 11) is drawn by a mule. The gun is to be fired only with the shaft on the ground. Horizontally the gun can be turned in the same way as the one just described, but the curved base plate is wanting. There are fixed to the carriage 16 boxes each containing 250 cartridges on a

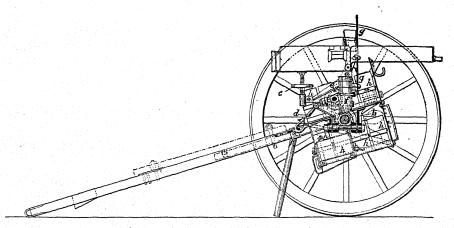


Fig. 11. Infantry machine gun-carriage. a Top carriage. b Bracket, c Elevating apparatus, d Hand wheel for clamping. e Hand wheel for traversing. f Socket, gg Protective shield. hh Cartridge boxes.

belt ready for firing. The wheels are 4 feet in diameter; the axle of the carriage is 3.2 ft. from the ground. Without gun and ammunition the carriage weighs 737.62 lbs.

## II. Tactical Notes.

#### a. Infantry.

In "Quick time" the men take 120 steps a minute, at the "Double" 165; the usual length of the step at the "Quick" is 30 inches, at the "Double" 33 inches. In marching order the usual front of the individual soldier is 27 inches, which allows him room for free movement of his arms without touching his neighbour on either side.

The following are the words of command for manual exercise with the rifle:—"Order Arms!" "Shoulder Arms!" "Present Arms!" "Slope Arms!" "Trail Arms!" (when the rifle is held horizontally in the right hand); "Charge bayonets!" The rifle can be brought to the ready for loading either from the shoulder, the slope, or the trail; for firing the words of command are "Present!" "Fire!" There is a separate drill for the bayonet exercise.

The Company is drawn up in two ranks, and divided into two Half Companies, and four Sections. The Half Companies are commanded by Lieutenants, the sections by sergeants, and numbered

from right to left. If a section has more than 10 Files, it is divided into two sub-sections, of which the right hand one is commanded by the section sergeant, and the left-hand one by the non-commissioned officer next in rank. This organisation of the company is retained also for interior economy, but for ceremonial parade the men are placed according to height. Fig. 1 exhibits the company drawn up in line, where the distances are given in paces. A company can be

drawn up also in:—Column of Half-Companies, Column of Sections, Column of Subsections, and in Column of Fours. In the first three formations the units are placed behind



Fig. 1. Company in line.

one another at distances between the ranks which are equal to the breadth of the front. The Column of Fours is formed by the even numbers taking one step back, and one to the right, which brings them exactly behind the odd numbers, whereupon the whole body turns to the desired flank. For skirmishing, the number of skirmishers and the distances between files are detailed specially. At drill in close or loose order words of command are given by signals or motions of the hand, which are prescribed with minute precision. The whistle is used only if attention is to be drawn to the next word of command, or for "cease firing!"

# EXPLANATION OF SIGNS FOR FIGS. I TO 5. (Distances in paces.)

古	Commander of Battalion	山	Section commander
d	and in command (Major)	占	Sub-Section commander
ф	Adjutant of Battalion		Staff-Sergeant
ō	Captain	E23	Man in frort-rank
9	Senior Lieutenant of Company		Man in second rank
9	Junior Lieutenant of Company		Engineer
6	Surgeon or Quartermaster	Φ	Bandmaster
0000	Queen's Colour	$\stackrel{\sim}{\Box}$	Band-Sergeant
0	Regimental Colour		Bandsman Drum major
击	Sergeant Major	N N	Drummer
古	Guide or Section commander	P	Signaller
	어머니, 하다 아이들이 얼마나 아이들이 되어 되었다.		

A BATTALION consists of 8 companies, and has only 3 mounted officers, viz: the Commander of the battalion, a Major, as Second in command, and the Adjutant of the battalion. It can be drawn up in Line, in Column, in Quarter Column, in Columns or Quarter Columns of Half-Battalions, and in Echelon. In Line (fig. 2) there is no interval between the companies. The colours borne by 2 Officers with an escort of 4 non-commissioned officers, are posted in the middle of the battalion, and they give touch and direction to the whole battalion. In column (direction by one flank) the companies (fig. 3) are drawn up in line behind each other, the interval from front rank to front rank being equal to the breadth in front.

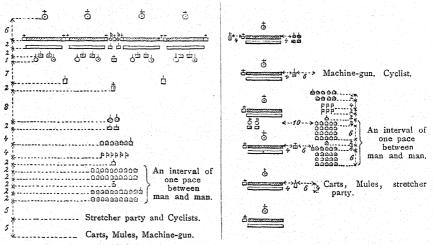


Fig. 2. A battalion (of 4 companies) in line.

Fig. 3. A battalion (of 6 companies) drawn up in column (by the left).

In Quarter column there is an interval of 6 paces, and the commanders of companies stand on the directing flank of their company. The Quarter-Columns of Half-Battalions (fig. 4) are formed on a

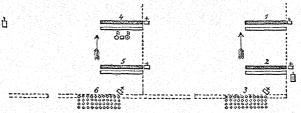


Fig. 4. A battalion (of 6 companies) in Column of Half-Battalions.

named company. The intervals are the same as in Battalion-Column. All changes of formation are executed in the shortest way. The men are also drilled in forming squares, which can be done from



Fig. 5. A battalion (of 6 companies) in echelon.

any one of the above formations, and is very necessary in warfare with savages. A battalion can also assume the above formations, when in sections, subsections, or in fours.

A BRIGADE consists of 4 battalions, and can be drawn up in Line, in Mass, where the battalions stand in Quarter-Columns behind each other, in Line of Quarter-Columns, the battalions being placed beside each other in Quarter-Columns, in Columns or Quarter-Columns of Half-Battalions. In all these formations the intervals between battalions are of 30 paces = 25 yards.

Rigid systems of attack are forbidden, nevertheless the regulations lay down certain general principles. Usually the troops, told off for an attack, are formed into 3 Lines. The first consists of a line of skirmishers, supports, and reserves, whose business it is to initiate the attack, and to advance to within 500 yards of the enemy's position, whence an effective fire against him can be opened. Whilst the first Line is advancing, the second is drawn up in successive echelon against the points of attack chosen; this Line advances at the given moment, carrying the first Line with itself, and by pushing forward its last echelon executes the decisive stroke. The third Line forms the reserve; in case of a reverse it receives the troops that have been repulsed, and if the attack has been successful the reserve carries on the pursuit. Wherever possible attacks in front are to be combined with attacks in flank. The formations to be adopted are those which will produce the greatest possible fire-effect upon the enemy, offer to him the smallest possible points of attack, and will utilize every cover, that does not interfere with the steady advance in a straight line. Whilst the first Line is skirmishing, and the supports are advancing in line or single rank the reserve follows in small columns. The formations of the second and third Lines depend on the nature of the ground. If it is intended to deal a decisive blow as many rifles as possible are to be engaged at once as skirmishers, and the losses of men in the skirmishing line are to be made good from the supports. At first the strength of the line of skirmishers, and of the supports will be about equal, and that of the reserve equal to that of the two other parts of the first line taken together. The second Line will be of about equal strength with the first, but the third will have only the strength of one third or even of one fifth of the whole. The breadth of the front of a body of troops delivering an attack is, as a rule, not to exceed that of the first Line, if drawn up in line, two deep. The distances depend on the nature of the ground, but those of the echelons of the first Line would rarely exceed 400 yards. During the early stages of an attack the second Line follows the first at a distance of about 800 yards, but at critical moments it should be ready to afford immediate support. The third Line follows the second at an equal distance. Up to the middle zone of fire the advance is made in line at the "quick", but as soon as the enemy's fire begins to cause heavy losses, the advance is made by rushes. Every cover is to be utilized. Fire is not to be opened till close to the enemy, and whilst the attack is being developed volleys only are to be fired by sections or subsections till the order is given for independent firing. number of rounds to be fired by the line of skirmishers at every halt, depends on circumstances. The advance is to be made as rapidly as possible, the main object being the attack with the bayonet. Independent firing is generally advisable only at short range, but if an especially favourable target presents itself, it may be ordered also at middle, or extreme ranges. The magazine fire is ordered only upon a sudden encounter with the enemy, or at close quarters; also before the charge or in resisting a cavalry attack; sometimes it may be used successfully upon a suitable target, even at greater distances; but then the aim must be to concentrate the fire as much as possible. When the enemy's fire becomes effective the mounted Officers dismount.

If a company is delivering an attack the Commander of the company takes up his post, where he can best observe the line of skirmishers, and whence he could most rapidly send orders to the supports. At the final assault he will lead the company in person. The Commanders of Half-Companies remain with their men; but if there are two or more Officers present with a company, one of them will take command of the line of skirmishers. They indicate the

point to which the next rush is to be made, give the ranges, watch the effect of the firing, and lead their Half-Companies at the final assault. The commanders of sections and sub-sections give the words of command for firing, superintend the proper adjustment of the sights, the consumption of the ammunition, and the filling of the magazines. At the commencement no more than half the company is employed as skirmishers, the rest following as supports. It is impossible to establish by regulation the width of the front of a company; the Commander of the battalion will be informed by the Commander of the brigade of the front of the whole battalion, and he will then arrange his companies accordingly. In an open country, and at distances of between 1500 and 3000 yards from the enemy, it will be enough to send out a section as skirmishers, the rest forming supports at a distance of 200 to 300 yards.

As has already been observed the extent of front of a battalion delivering an assault is determined by the Commander of the brigade. The Commander of the battalion takes up a position, where he commands a convenient view of his battalion, and the Officer, who is second in command takes charge of the reserve of the battalion; the Adjutant of the battalion assists the Commander, and superintends the placing of ammunition-mules and ammunition-carts; the sergeantmajor stops with these latter, and superintends the distribution of the ammunition. The line of skirmishers is to be reinforced as long as possible by the unit from which it has been drawn, therefore it will consist of sections and half-companies, behind which the rest of the same companies follow. The companies resolved into lines of skirmishers and supports, receive reinforcements from the reserve of their own battalion, where the colours are. At the bayonet-charge the men cheer, the drums beat, the bugles sound, and the bagpipes play.

For the higher units the regulations determine in accordance with the above directions, that a brigade ordered to deliver an assault is to occupy a front, not exceeding  $\frac{1}{3}$  of a mile, and in many cases even this limit is not reached. In similar circumstances a Division with both brigades in line would occupy a front of about half a mile. If it is not intended to carry out the assault till the charge is delivered, then the front of the brigade may occupy  $\frac{1}{2}$  mile, and that of the Division I mile. In this manner an army-corps of 2 Divisions in

<sup>&</sup>lt;sup>1</sup> Colours are now never taken on service, nor indeed do they appear except on ceremonial parades. The translator.

line, one of which is ordered to charge, may occupy a front of  $\mathbf{1}_{\frac{1}{2}}$  miles, whilst the third Division remains available as reserve.

In defence it is calculated that to occupy a fairly strong and partly intrenched position, there are required for every pace of ground 5 men of all arms, inclusive of reserves. The troops are grouped into three Lines, as is done in delivering an attack. The first Line forms a line of skirmishers as close as possible, divided into sections, with local supports and reserves, and it also sends out men to occupy advanced posts, if any. The second Line protects the flank with troops carefully placed under all available cover; it stands ready, jointly with other spare troops, to support the first Line, or carry out counter-attacks, whilst the third Line is drawn up in a position, whence it can assume the offensive with greatest effect, as soon as the attack is fully developed. The troops of the first Line must be kept well supplied with ammunition, and communication must be kept up by flag signalling.

In battle every half-battalion is followed by an ammunition-cart and a mule; the animal is placed behind the supports, the cart behind the reserve; the other two carts of each battalion are combined to form the ammunition-reserve of the brigade, and follow behind the second half of the brigade in charge of a mounted officer. In every company I non-commissioned officer, and 2-3 privates are told off to bring and distribute the ammunition. Before the commencement of the engagement 50 cartridges are to be taken out of the ammunition-cart for each man, so that each one is supplied with 150 cartridges. During the battle cartridges must be sent to the front at every opportunity. In every cart there is a number of sacks (each containing 300 cartridges) two of which sacks can be brought up by each ammunition-carrier. The carriers stop with their companies, and subsequent relief must come from the companies of the reserve. It is the duty of the non-commissioned officers to see that the cartridges are taken from the dead and wounded. Although the regulations prescribe that the ammunition should be brought to the front by men, yet the ammunition-carts and the mules must be pushed forward as much as possible. On ordinary ground the former must stand at a distance of 1000, the latter of 500 yards from the line of skirmishers; in wooded or covered ground the distances are to be still less. As soon as an ammunition-cart is emptied, it is sent to the rear to the ammunition-reserve of the brigade, and is replaced by a full one. If at the ammunition-reserve of the brigade there are

4 empty carts, the Officer in command of it demands 4 full carts from the ammunition-column. The teams, that bring these up, take back the empty carts. No men or horses of the infantry are to be sent to the rear to the ammunition-column, but similarly none of the latter may be pushed forward further than to the ammunition-reserve of the brigade. To keep up communication with the ammunition-column, the latter supplies the Commander of the ammunition reserve of the brigade with a mounted orderly.

The machine-guns with the infantry are to be employed in accordance with the orders of the Commander of the Brigade or Division. The use to be made of these guns depends on circumstances, and if possible, their position is to be so chosen that they can deliver their fire on the point of attack. The most dangerous enemy of the gun is the enemy's artillery, to the fire of which they should never be exposed. Generally more than two machine-guns are not placed at any one point. In defence, where they can be put under cover, their service is more effective than in an offensive operation.

## b. Cavalry.

The rate of marching of the British cavalry is: at a walk 4, at a trot 9, and at a gallop 15 miles an hour, or 118, 264, and 440 yards per minute respectively. In line there is an interval of 6 inches between man and man from knee to knee; accordingly every horseman occupies a front of 1 yard. All movements are made by the centre.

The SQUADRON is the tactical unit of the cavalry. It is drawn up in two ranks, and consits of 3 or 4 troops, according to the strength of the squadron. A troop consists of not less than 19, and not more than 32 men, inclusive of the non-commissioned officers; 24 to 32 men form a troop of 16, 19—23 men of 12 files, the front rank being always complete, while the rear rank may contain blank files. If the squadron numbers 96, or more men in rank and file it will form 4 troops of 16 files each; if it numbers only 80 to 96 men, it will form 4 troops of 12 files each. A squadron of less than 80 men is divided into 3 troops, but a troop must always have 12 to 16 men in the front rank, and all the troops of a squadron must have an equal number of files. Farriers, trumpeters (who do not accompany the Commander of the squadron), scouts, and signallers ride in the second rank, and men, for whom there is no room in

the latter form serrefiles. The troops are numbered from right to left, and from front to rear; they are commanded by Officers or sergeants. Every troop is divided into 3 or 4 sections, each consisting of 4 files. The senior non-commissioned officer of the troop commands the 2nd section, and rides in it as No. 4, if the troop consists of 4 sections, and as No. 2, if it consists of only 3 sections. He is called "Centre Guide", and takes command of the whole troop, if the Commanding Officer is put hors de combat. The senior non-commissioned officers of the 1st and 3d (or 4th) sections ride on the flank of the 1st rank as No. 1 or No. 4 of their sections respectively. The Commanders ride in the centre in front of their troops, and the distances between them and the 1st rank, as well as between the 1st and the 2nd rank are, if in line, a horse's length, if in column half a horse's length.

The formations of the squadron are the Line, the Squadron Column, and the Squadron Half-Column. In line (fig. 6) the troops are drawn

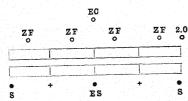


Fig. 6. Squadron in line.

up without interval. The Second Senior Officer of the Squadron rides at the distance of a horses length in front of the right hand file, and an Officer rides as Squadron Serrefile at the distance of a horse's length behind the centre and the Squadron-sergeant-major,

and Squadron quartermaster sergeant ride at the same distance behind the two wings. In the Squadron Column (fig. 7) the distances be-

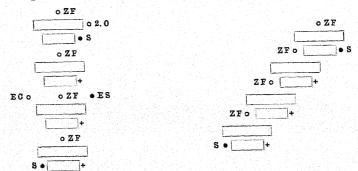


Fig. 7. Squadron in Column-troops of 12 files.

Fig. 8. Squadron in Half-Column troops of 12 files.

tween the troops are equal to the front of a troop, and in Squadron Half-Column (fig. 8) the distances are so arranged, that a wheel of

one eighth of a circle towards the inner flank brings the Squadron into line.

The marching formations are in columns of eight, four, two, or single men, and can be formed either by advancing or breaking off from a flank. In the column of eight the four men of the rear rank of a section ride to the right or to the left of the front rank, but in all other marching formations the men of the rear rank always follow their leading file in the front rank. The distance between ranks is half a horse's length. At drill the Commander of the Squadron, accompanied by a trumpeter, rides where he obtains the best view of his squadron, and gives his orders either by word of command, trumpet, or signal with his hand or sword. At a trot or gallop all wheels or changes of direction are executed on a movable inner pivot, the rate of movement being quickened on the outer, and retarded on the inner flank, whilst the Commander of the troop retains the original rate.

A REGIMENT consists of 4 Squadrons, 1 and may be formed in Line, Line of Squadron-Columns, in Mass, in Column of troops, and in Half-

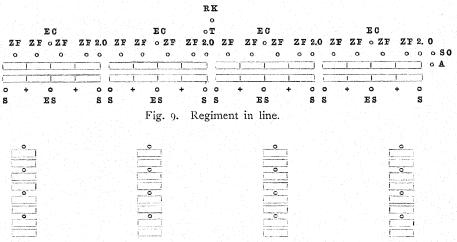


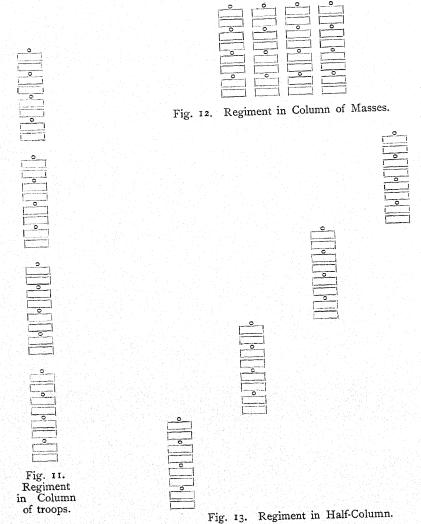
Fig. 10. Regiment in Squadron-Columns.

Column. From each of these formations echelon can be formed in any direction. In Line the interval between the squadrons is 8 yards, in Squadron-Column the front of two (to three) troops plus 8 yards. In Mass the Squadrons are drawn up beside each other at intervals of two horse's lengths. In the Column of Troops the distances between

<sup>&</sup>lt;sup>1</sup> Regulations for the drill of regiments of 3 squadrons have not get been issued.

the troops are equal to the front of a troop, the distance between the squadrons being 8 yards. In a Regiment in Half-Column the distances between squadrons are regulated in the same manner as for the troops in squadron half-column. These formations are exemplified in figs. 9 to 13.

A CAVALRY-BRIGADE consists of two to three regiments, and can be formed in Line, Squadron-Columns, Brigade-Mass, Brigade-Column with Line of Masses at deploying interval, Column of Masses, Column of troops or Half-Column; in every case an interval of 16 yards is observed between the regiments.



#### EXPLANATION OF SIGNS IN FIGS. 6 TO 13.

- RK Commander of Regiment
- EC Squadron Commander
- ZF Troop Commander
- 2.0 2nd in Command of Squadron
- \$0 2nd in Command of Regiment
- A Adjutant
- ES Squadron Serre file
- s Squadron Sergeant major or Quartermaster sergeant
- T Commanding Officer's Trumpeter.

A CAVALRY-DIVISION consists of 3 Cavalry-Brigades of 2 regiments each, and 2 to 3 horse batteries; this organisation is in accordance with the drill-regulations of 1896. But according to the orders for the organisation of the army in the field (see Section I, Ch. VIII) a Cavalry-Division is defined as consisting of 2 Brigades of 3 regiments each. At the assembly a Division may assume any formation suitable to the ground; when it begins manœuvring it adopts the Preparatory Order, having usually one brigade in the first line in Brigade Mass, in Line of Squadron-Column or Line of Masses at deploying interval; the two other brigades follow in Brigade Mass in the second line at a distance of 200 yards on either flank, and 50 to 100 yards deploying interval. The batteries move near the Division either on the flank or behind the first line, according to the expected nature of the ground.

The formation for battle naturally depends on the enemy's movements and on the nature of the ground; but usually at drill the brigade is formed into three lines. The brigade in the first line moves in Line of Squadron-Column, and attacks in Line. The second line follows the first at a distance of 180 to 250 yards echeloned 50 to 100 yards beyond that flank which is most exposed to the attack of the enemy. It moves in Line of Squadron-Columns with the regiments, or formed in echelon in Line of Masses at deploying interval, or with the outer regiment in Column of troops. The third line follows the first in Brigade-Mass at a distance of 350 to 400 yards, and echeloned 16 yards beyond the other flank. The first line can be re-inforced by squadrons from the second or third line. The attack begins at a distance of from 1200 to 1800 yards; of this one third is ridden at a trot, and two thirds at the gallop. At 500 yards distance the command "The Line will attack!" is sounded, at 70 yards "Charge!" is commanded, and thereupon the pace is increased to the utmost allowed by regulation. Cavalry can be assembled to the front, to a flank, or to the rear. On the "Rally!" being sounded the men quickly form in two closed ranks behind the Officer who ordered the call.

In an engagement of cavalry against cavalry the object of the first Line is to break into the enemy and to overthrow him at the first onset; this Line must therefore be so re-inforced that it may be able to overwhelm the first line of the enemy. The second Line supports the first by falling upon the rear and flank of that body of the enemy, which is engaged in a hand to hand contest with the first Line, or by receiving and disengaging the latter in case of a reverse. The third Line forms the last reserve of the Division and brings about the final decision of the struggle. As a rule it is drawn up at the normal distance from the first Line till the attack has been delivered, and does not deploy into Line of Squadron-Columns till the last units of the second Line are involved in the engagement; it then is drawn up at half distance, and awaits the orders of the Commander of the Division, with whom its own Commander must remain in constant touch. The pursuit is carried out by all the squadrons that had taken part in the engagement with the only exception of the directing squadron of each regiment, which assembles and follows as support. A retreat, if such should be necessary, is covered by this Line.

If cavalry is to attack infantry the formation again depends on the condition of the enemy. If he is scattered in skirmishing line, or has in some way been disorganised, the attack is made in loose order; but if the enemy's infantry is in close order and unshaken, the attack must be made in close order by regiments or squadrons following each other at intervals of 150 to 200 yards, and from different directions. The nature of the ground is to be utilized in every way, so as to take the enemy by surprise; but if circumstances are not favourable for such a manœuvre compensation must be secured by rapidity of execution. At a distance of 1000 yards or more the gallop must commence, and the pace quickened as much as possible. It will always be advantageous to commence the advance in loose order, or at large intervals, and to form close formations when near to the enemy.

Artillery is attacked in loose order, observing the same tactics as in attacks on infantry. The first Line is followed at a distance of 150 to 200 yards by squadrons in close order or by other units, whose business it is to engage the troops covering the artillery, and these are followed at a similar distance by the reserves. Whenever possible, artillery must be attacked at the flanks.

Cavalry fight on foot only exceptionally, viz: when a result can be obtained by no other means. On those occasions numbers 1, 2,

and 4 of each section dismount with their carbines, and leave their horses in charge of number 3. The lances are left in their sockets by the stirrup, and are fastened to the saddlebags. The Commanders of troops dismount with their men. The led horses remain behind in charge of an Officer in a covered position, but as near as possible to the dismounted men, whose movements they are bound to follow. A party always remains on horseback to cover the led horses, patrol the flanks, cover the retreat, or follow up quickly any advantage gained. A combat on foot must be conducted with utmost energy, and firing at long ranges must be avoided. Against riflemen under cover fire should be held till within 350 yards; but if the target be large, it may be successfully opened at 600 or even 800 yards. Volley firing is to be adopted as much as possible.

In cavalry fights the cavalry machine-guns are to be pushed forward as speedily as possible into the positions from which they can play upon the enemy with utmost effect, and they go on firing till they are masked by their own men. The Officers in command of machine-gun sections receive only certain general instructions, in the application of which considerable latitude is allowed them. Special protection is not to be told off for these sections; they are to be auxiliaries to the cavalry, but never a burden or a hindrance. In many cases they will relieve the cavalry from the necessity of dismounting, in order to occupy a certain position; in pursuit they accompany the squadrons, and make good their deficiency in fire effect. In case of a retreat they can hold passes or other suitable positions, and can in other ways facilitate the retreat of the cavalry. Mounted infantry attached to Divisions or Brigades of Cavalry may be similarly employed; it increases the self-dependence of the cavalry, especially if it has been pushed far to the front on reconnoitering duty; and it also confers on it a defensive power, which, without it, it would possess to but a slight degree. The mounted foot-soldier only fights on foot, and marches usually with the horse artillery, which they cover in an engagement against cavalry attacks. Mounted infantry is to be employed on all occasions when the cavalry dismounts, but it is never employed in reconnoitering service or other cavalry duties. The object of mounted infantry is to assist the cavalry, not to replace it.

The squadrons told off to Divisions of infantry are intended to help these Divisions in every possible way in the task allotted to them. They cover the columns on the march, reconnoitre the enemy, keep up communications with neighbouring columns, and in battle they keep in covered positions ready to fall upon such bodies of the enemy as lay themselves open to such assaults. Even very small bodies of cavalry may in this manner aid in gaining considerable results.

A Division of cavalry which has been pushed forward to reconnoitre the enemy, or to mask the movements of their own army, may in cultivated ground occupy a front of 12 miles, in uncultivated or open grounds 18 to 20 miles. The main bodies of the columns (Brigades, &c.) would march by the most suitable roads, and, in accordance with the regulations, a Division may be regarded as sufficiently concentrated if it advances by Brigades on three roads in such a manner, that the distance between the two outer brigades amounts to 6-7 miles, and the middle brigade moves as reserve behind the front of the other two. The general distribution of the Division would then be somewhat as follows:—Each of the flank brigades would push forward a regiment for 2 or 3 miles, and this would in its turn advance 3 squadrons to a distance of 11 to 3 miles, whilst the fourth squadron keeps to the main road. The so-called Advanced Squadrons would cover themselves by small van-guards and scouts, and push patrols for several miles. How far the Advanced Squadrons may venture in front of their nearest supports depends on the nature of the ground, and on the nearness and strength of the enemy. In an open country the patrols may be 5 miles ahead of the squadrons. Special value is attached to keeping up communications, and, if necessary field signal posts are to be arranged for. To keep up communications between the different main sections of a cavalry Division on reconnoitering service, a halt is recommended every 4 or 5 miles on some line previously determined, and no forward move should take place till reports have come in from all sections. The Commander of a reconnoitering troop is bound, unless ordered otherwise, not to lose touch with the enemy when once he has discovered him. Squadrons, or other bodies, may be detached for the purpose of gaining touch with the enemy or for any other object. These bodies are called Contact Squadrons, whose Commanders receive special instructions. The above scheme is of course only adduced as an example, and may be modified according to circumstances.

#### c. Field-Artillery.

Every gun is worked by two non-commissioned officers and 8 privates; 3 men being added with the horse artillery to hold the horses. The senior non-commissioned officer, being chief gunner, is No. 1; he is mounted, and rides on the left of the driver of the leaders; the second non-commissioned officer is in charge of the ammunition-wagon. With the field-artillery the gunners Nos. 2 and 3 are seated on the limber, 4 and 5 on the axle-seats, 6 and 7 on the limber of the ammunition wagon, and 8 and 9 on the ammunition wagon itself. With the horse artillery all the men are mounted, and ride in ranks at half a horse's length, either a horse's length in front or behind the gun, or half a horse's length to the right or to the left of the leading or centre horses. The non-commissioned officer No. 1 leads the gun, and is in command of it, gunner No. 2 makes ready and fires, gunner No. 3 opens and closes the breechblock and loads, No. 4 aims; gunners 5 and 6 stand by the limber or ammunition wagon (see below), and attend to the ammunition, which No. 5 brings in a box, and hands to No. 3. Gunners 7 and 8 form the reserve and remain with the line of wagons. Usually the ammunition is taken straight from the ammunition wagon. One ammunition wagon is brought forward for each section and posted 12 yards in the rear of one of the guns; the horses are then led back to the line of wagons. If in special cases the ammunition is to be taken straight from the limber, then these are placed 10 yards in rear of the guns, the drivers are seated on horses, fronting towards the enemy.

The BATTERY AT WAR STRENGTH consists of 6 guns and 6 ammunition-carts, and is formed into 3 sections, which are commanded by Lieutenants or senior non-commissioned officers. The guns are numbered from right to left; the sections are designated as right, centre, or left section, according to their position in the battery. On the march the wagons follow close behind their guns, and may not be parted from them till the battery leaves the road; then they follow battery by battery under the command of a Captain (second in command) at a distance of 240 to 400 yards. The supply of the ammunition will be described at a later stage.

A battery can be formed in Line, at close, half or full interval, in Column of Sections at full or close interval, in Column of Subdivisions, or in Column of Route. Fig. 14 exhibits a battery in line at

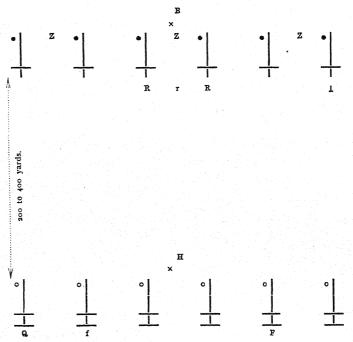


Fig. 14. The battery in Line at full interval.

full interval. The interval between the guns measured from No. I to No. I is 20 yards in all. The Commander of the battery, accompanied by a trumpeter posts himself two horses' lengths in front of the centre of the battery, the Commanders of Sections between their guns in line with the leading horses, the battery sergeant major and range finders, one horse's length severally to the rear of the 1st, 3d, and 4th gun. The Captain rides two horses' lengths in front of the centre of the line of wagons, the farrier-sergeant, the farrier, and the quarter-master sergeant severally one horse's length to the rear of the 2nd, 5th, and 6th ammunition-wagon. In the line at half interval the interval is 10 yards, in the line at close interval 4 yards. In the latter the Commanders of Sections ride at a distance of one horse's length in front of the centre of their several sections. The battery marches by the centre, and the 3d gun gives direction to the whole battery. In the Column of Sections the Sections are drawn up behind each other at intervals of 40 yards. In the Column of Subdivisions the guns follow each other at intervals of 20 yards, that is to say at a distance of 4 yards from the muzzle of the gun to the

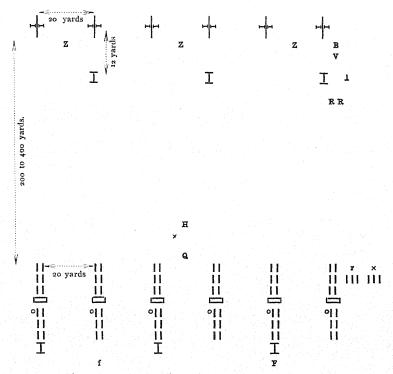


Fig. 15. A battery in action (Wagon supply).

heads of the horses next following. In the Column of Route the ammunition wagons follow their guns at a distance of 4 yards. In action (fig. 15) the Officers of the batteries dismount. The Commander of the battery together with the battery sergeant major and a man specially trained as observer, stand at the flank of the battery whence he can best watch his battery and observe the effect of its fire. The range finders stop near the Commander of the battery. The three ammunition-wagons stand behind the right guns of the sections; the limbers, the other three ammunition-wagons, and the

#### EXPLANATION OF DIAGRAMS 14 AND 15.

-	****	 ~	
		-Com	

H Captain

Z Section Commander

1 Battery Sergeant Major

Q Quartermaster Sergeant

• Nos. I

o Nos. 2

× Trumpeter

V Observer

F Farrier-sergeant

f Farrier

R Range finders

r Men holding horses for the Range finders. horses of the ammunition-wagons belonging to the battery are drawn up under the command of the captain 200 to 400 yards behind the battery; the drivers are dismounted, and the best possible cover attainable is to be utilized.

A Brigade Division numbers 2 or 3 batteries, and may be formed: (1) in Line at full or close interval (intervals of 10 to 25 yards); (2) in Column, where the batteries are drawn up behind each other; (3) in Quarter-Columns, where there is only an interval of 21 yards, or (4) in line of Battery-Columns, the usual manœuvre formation, in which the batteries are placed side by side in Column of Sections at full interval with intervals of 25 yards between batteries. It may also adopt the formation of Column of Sections, Column of Subdivisions, and Column of Route. In these cases the distance between the several batteries is 10 yards.

The main principle for the employment of artillery in battle is to develop as soon as practicable a superiority in the number of guns. It will for this reason occupy in the Column of Route a position as near to the front as possible, and will be pushed forward and put in position, without waiting for the arrival of the infantry. It is the duty of the infantry of the vanguard to cover the artillery but the latter must provide for its own security by scouting to its front and flanks. According to the regulations the artillery is to work by Brigade-Divisions, and these are to move into position and open fire as nearly as possible simultaneously, and at full intervals. Men and horses always front towards the enemy. Changes of position should be as few as possible, and artillery, once under fire, must not fall back without express orders from the Commander-in-Chief, not even if it has to be silent from want of ammunition. It must endure till relief is brought.

Whilst the Brigade-Divisions are coming up or assembling out of the Column of Route, the Commanders accompanied by the Adjutants and Range-finders ride forward to select the positions of the batteries in accordance with the orders of their Superiors in command. The Adjutants are then sent back to lead the batteries into the assigned positions, and whilst these latter are approaching the Commanders of the batteries gallop off to the Commander of the Brigade-Division for further directions. If a position is to be occupied, which is commanded by the enemy's fire, it is usual to bring the batteries up in Line at full interval by the shortest route; but if approach can be made under cover, a halt is commanded while still covered, so as

to take the enemy by surprise by fire being opened simultaneously.

In selecting the position for firing a commander must always aim at producing the greatest possible effect; for this reason the enemy should, if possible, be visible from the sights of the gun. Indirect firing from covered positions should be only employed under exceptional circumstances. Sufficient room for the guns, and a clear field of fire are essential. A position with objects, such as trees or houses &c. near it, by which the enemy would be enabled to find his range more easily, must be avoided. If the fire effect is not impaired thereby, then it is advisable to place the guns behind some natural or artificial cover.

It is the business of the Commander of the Brigade-Division to regulate its tactical action, assigning to each battery its target, and ordering the description of fire; but finding the range and superintending the firing is the duty of the commanders of batteries. Every battery has a Range-finder, but it is to be resorted to only at times in finding the range when employing shrapnel with percussion fuze.

Distances of 2500 yards or more are designated as "extreme"; between 2500 and 1500 yards as "mean", and under 1500 yards as "decisive." At a distance of 1000 yards artillery may still offer resistance to infantry, but if the latter comes to closer quarters the artillery is in danger of being silenced. Artillery that has ascertained its ranges may make it dangerous for the enemy's guns to unlimber within a distance of 2500 yards. There are four recognised modes of firing, viz:-independent fire, or battery fire, section fire, or by salvoes. In independent firing every gun is fired by word of command or signal from the Commander of the battery; this method is adopted in finding the range or at great distances, where every shot must be carefully watched, or if ammunition is running very short. Battery fire is the rule, when once the range is found. The guns are then fired at intervals of 10, 15, or 20 seconds from flank to flank without further word of command from the Battery commander; in firing by sections the guns are fired by word of command from the Commander of the section alternately, and as rapidly as possible, without regarding the rest of the battery. Firing by salvoes is adopted only on special occasions. With the exception of the case-shot, the shrapnel is the sole projectile of the British artillery. Upon large targets, and at distances up to 1000 yards, the bursting of the shrapnel shell is arranged to take place 90 yards short of the target; for distances up to 2000 yards, 70 yards; up to 3000 yards, 50 yards; for distances over 3000 yards, 40 yards. The height above the target for bursting is reckoned in feet, and always amounts to two thirds of the bursting distance. Shrapnel with percussion fuze are used in range finding, or against troops under cover, or when there is no time for adjusting the time-fuzes.

The artillery initiates the assault of the infantry by first silencing the enemy's guns, and then directing its fire against the point of attack that has been selected. As soon as all the available batteries have arrived on the field of battle they are posted as speedily as possible in a position which is within mean range of the enemy's After all the batteries have found their range, the fire of all the batteries of a Brigade-Division will gradually be concentrated upon single batteries of the enemy. When the Officer in chief command has selected the point of attack, and considers that the enemy's guns have been sufficiently silenced, the greater part of our guns is directed upon the point of attack, whilst a small part of it is engaged in keeping down the fire of the enemy's guns in other parts. But when the infantry is set in motion against the selected point of attack, every gun must be brought to bear upon this point, regardless of all losses, as it is then the first duty of the artillery to support the infantry. When the fire of the batteries is masked by the advancing infantry, a part of the guns is pushed forward with filled limbers near enough to act with decisive effect. When the enemy's position is taken, every available gun is planted there, so as to pursue the fleeing enemy with telling effect.

In defensive actions the positions of the artillery will first be selected and prepared, but it is not as a rule advisable to put all the guns in position at the very beginning. At the early stages of a defensive engagement the artillery will endeavour by firing at long range to compel the enemy to deploy as soon as possible; but as the first object must be to discover the enemy's position, a portion of the artillery is intentionally kept back. If the attacking party deploys a superior number of guns, the artillery of the defenders may still retain the advantage, because it has already ascertained its range, and can make use of better cover both natural and artificial. For this reason heavy losses must be inflicted on the attacking artillery before they have had time to find their range, and the advantage of better cover will enable the defenders to hold out for a long time even against a superior number of guns. Should the enemy establish

a decisive superiority, then it might be advisable to cease firing, and wait for the assault of the infantry; as soon, however, as this latter is set in motion all the guns must be brought to bear upon them, regardless of the enemy's artillery fire, and this action must be persisted in to the last with the utmost intrepidity. In a counterattack, or in pursuit, the artillery must join in, unflinchingly, to secure the full advantage of the success gained.

The horse artillery joined to a Division of Cavalry must be kept together. As far as safety will allow it marches at the head of the column, but the ammunition wagons follow at the distance of about one mile behind the main body of the cavalry. The officer in command of the horse artillery accompanies the Commander of the Division on all reconnaissances, and stops with him, till the plan of attack has been settled; after that he assumes the command of the batteries. During changes of formation the batteries move at the flank of the Division in front or behind the centre of the first Line, and form in Column of Batteries. In an engagement of cavalry against cavalry it will be most convenient to place the horse artillery well on the flank, and in front of the cavalry making the attack. The batteries must assume their positions as early as possible, and these must be so chosen that the most effective fire can be maintained up to the moment of the actual collision without interfering with the freedom of movement of their own cavalry. Under fire the Commander of the Artillery will, as a rule, act according to his own discretion, but he must support the cavalry in every possible way. The first object of the artillery is to put the enemy's cavalry in disorder; to combat the enemy's guns is of minor importance. If the attack is successful the artillery will advance to co-operate in the pursuit; if the attack fails, the artillery retains its position so as to receive the retreating cavalry. It is the duty of the first Line of the cavalry to cover the artillery, and for that purpose there is sometimes detailed to it an especial escort of cavalry, or of mounted infantry.

As has already been pointed out above fresh ammunition is usually supplied from the ammunition-wagons, but it is taken from the limbers in supporting an infantry attack, in pursuit, and during a cavalry engagement the horse artillery is also supplied from the limbers. When a battery has taken up its position for firing the Captain at once sends it 3 ammunition-wagons from the line of wagons; with the others he posts himself under the best possible cover about 180 to 300 yards to the rear of the battery. The horses of the wagons that

remain with the battery as well as the limbers are sent to the rear of the line of wagons. As soon as the ammunition begins to run short, 3 more wagons are sent forward, and the empty ones are taken back to the line of wagons, whence they go back in sections to the ammunition-column. Losses in the batteries are also made good from the line of wagons. The ammunition-columns of the Division are called up as soon as possible, and posted at the distance of about a mile to the rear of the batteries that are engaged. As soon as it arrives its battery ammunition-wagons are pushed forward to the line of wagons of the batteries, and distributed amongst them. All the empty carts sent back by the batteries are filled again from the other ammunition-wagons, and return to their several lines of wagons. The ammunition-park of the Corps forms the reserve, from which the ammunition-columns of the Division replenish themselves, and all other things required by the batteries, which cannot be furnished by the ammunition-columns, are also drawn from this same source.

#### d. Marching.

The usual formation of INFANTRY on the march is the column of sub-sections or of fours, according to the width of the road. They take the left hand side of the road, and leave the right hand side free. When "March at Ease!" is sounded, the men may open out, they may smoke, sing, and carry the rifle as they like; in passing a town, a narrow pass, and also before a "Halt!" the command "March to attention!" is given. An Officer marches behind every company, and he is responsible that no man leaves the ranks without permission. The regulations prescribe that a battalion is not to fall in sooner than a quarter of an hour before marching off, and that the battalions of a brigade should not be ordered to a place of assembly, but should have to pass a certain place at an appointed time. The battalion-interval is 25 yards, that of a brigade 100 yards. Half an hour after the commencement of the march there is a rest of 5 minutes; subsequently a similar rest is given every hour. With such short pauses of rest the march is to be at the rate of 3 miles an hour. Should the march last more than 6 hours, a longer rest is ordered at half way, during which the men are allowed to consume the ration they have brought with them. As a rule the infantry starts, at the earliest, an hour before daybreak, but the object of the march, the climate, the season, and the distance from the quarters of the night must be taken into consideration.

The CAVALRY marches in column of sections or half-sections. It also does not, as a rule, start earlier than an hour before day-break, so that the horses may first be fed, and watered. The sooner a march is finished the better it is commonly for both man and horse; a rate of 5 miles an hour is therefore demanded. To attain this it is usually necessary to travel at an easy trot some 7 or 8 miles an hour with short changes of pace. On steep slopes it is sometimes advisable to order the men to dismount, and lead their horses. After the first 1½ or 2 miles a halt is made for 5 or 10 minutes to have saddles, girths, horseshoes, &c. examined; afterwards a similar halt is made every 4 or 5 miles. In longer marches an hour's rest is given for the horses to be fed and watered. The last two miles are always travelled at a walking pace, to cool the horses before going into quarters. The distance between squadrons is 12, between regiments 25 yards.

The formation for marching of the ARTILLERY is in Column of Subdivision. On very broad roads the Column of Sections at close interval may be adopted, but it is never allowed to occupy the whole breadth of the road. Every gun is followed by its ammunition-wagon, and it is forbidden to separate them, to mass the wagons behind the guns, or to let them march separately. The regulations for the marching of the artillery are the same as those for the cavalry, but the Field artillery is not usually expected to make more than 4 miles an hour, which is managed by walking at the rate of 4 miles per hour varied by an occasional short trot. On sloping ground the men dismount. The distance between the batteries is 25 yards, the trumpeters ride in front and at the rear of every battery, and pass on the calls that are sounded.

In accordance with the official "Lectures on Staff Duties" the BAGGAGE is divided into heavy and light. The light baggage consists of:—

With a battalion of infantry, the led horses, 4 ammunition-carts, 1 cart with intrenching tools, and 3 pack mules;

With a battalion of mounted infantry, the led horses, 4 ammunition carts, and 1 pack mule;

With a regiment of cavalry, the led horses, 2 ammunition-carts, and 1 pack mule;

With a battery, the ammunition-column or company of field pioneers, the led horses.

On marches in war the light baggage follows immediately in the rear of the unit to which it belongs; the remaining ammunition-carts of the infantry and cavalry are assembled by brigades, and march in the rear of the brigade, advance guard, &c. The remaining vehicles form the heavy baggage, which are drawn up by brigades in the same order as the units of the column are drawn up, and they march at stated intervals behind the combatants.

The depth of the marching columns inclusive of the light baggage is as follows:—

	yards
Infantry battalion in fours	350
2 companies of mounted infantry in sections	250
Regiment of cavalry of 3 squadrons in sections	435
Squadron in sections	135
Horse artillery in column of subdivisions (the men marching	
in sections)	280
Mounted artillery in column of subdivisions	224
Company of field pioneers	180
Detachment of mounted pioneers	132
Medical Service detachment	170
Staff of brigade	10
Staff of division	30
Staff of army-corps	50
Brigade of infantry (with intervals)	1734
Brigade of cavalry (with intervals)	1634
Division of infantry (with intervals)	4682
Army-Corps	16633

Every body of troops advancing in an enemy's territory provides for its security by forming an advance guard, whose duty it is to reconnoitre the enemy, and keep safe the line of march. If a small force of the enemy is encountered the advance guard will drive him off, so that the forward march of the main column may not be retarded or disturbed, but if the enemy is present in superior numbers the advance guard assumes a defensive formation so as to check him till the main column has had time to pass from the marching formation into the formation of battle. The advance guard consists of two bodies:-the Main Guard, and the Van Guard. The object of the latter is to reconnoitre, therefore there is detailed to it the greater part of the available cavalry, with but little infantry to act as support. Artillery is added rarely, and only with large advance guards. Cavalry reconnoiters to the front and flanks, and maintains communication with columns marching on parallel lines. The Main Guard is the combatant element of the advance guard, and consists therefore of men of all arms in the usual proportions. The strength of the vanguard depends on the strength of the whole force, and on the nearness of the enemy. Strong bodies of troops have proportionately larger advance guards than weak columns, and the proportion of the advance guard to the whole body varies between one eighth and one The composition of the different arms depends on the nature of the ground, and on the character of the enemy. In an open country cavalry and artillery will, no doubt, be present in greater numbers, but the main body will always consist of infantry. The tactical combinations must be interfered with as little as possible; the advance guard will therefore be drawn from the brigade or division which is at the head of the column of march. The battery, and if possible also section units, are to be kept unimpaired, therefore there are always told off to an advance guard a whole battery or section, according to its strength; the artillery marches at the rear of the first battalion of the Main Guard. Mounted infantry is specially fitted for advance guard duties in order to anticipate the enemy in the occupation of important positions or defiles. If circumstances require it pioneers are also added to the vanguard, and cyclists keep up communications with the main-columns and the side-columns. The intervals between the Van Guard and the Main Guard, and between this latter and the whole force depend on circumstances, and are larger with large bodies of troops; but the uniform principle to be observed is, that they must be sufficiently large to give time to the main body to draw up in adequate force, ere the enemy can deliver an attack. On a retreat it is the special duty of the vanguard to keep open the line of retreat, and for that purpose as large a numbers of pioneers as possible are detailed off to it.

In a forward march it is the task of the rear guard to collect the stragglers, protect the baggage, seize marauders, &c.; it is principally composed of infantry and some cavalry. The field-police also finds here plenty of employment. On a retreat the rear guard is organised like the advance guard in an advance, but it has commonly to be stronger, especially in artillery. Its principal duty is to gain time for the retreating column; it will generally therefore deploy its whole force at once, assume a defensive position, and thus compel the enemy to deploy at a considerable distance. When that is done, it will fall back to repeat the same operation further on. To prevent outflanking movements it is indispensable that the flanks be thoroughly reconnoitered.

The sequence of troops on the march is indicated by the orders for the march, and depends on circumstances. If an engagement is anticipated the artillery will march at the head of the column; but some infantry must always precede it. The artillery of the Division marches at the rear of the foremost battalion of the main body of the Division, and the Corps artillery at the rear of the first Division. The companies of field-pioneers, and the medical service detachments follow the units to which they belong. Army Service-Corps and columns are organised into two divisions; the first consists of the divisional ammunition-columns, and a part of the field hospitals, the second of the companies of the army service-corps, the Corps ammunition-park, and the remaining field hospitals. The pontoon-service of the corps and the park of field engineers either march with the combatants or with one of the two divisions of the army servicecorps. If an army corps advances on a road anticipating an engagement, the first division of the army service-corps and of the columns will follow the troops at the distance of about I mile, whilst the heavy baggage and the second division of these bodies either stop at the rear till the battle is decided, or follow the first division at the distance of about half a day's march.

## e. Outposts.

A body of troops at rest is protected by detachments placed in front and at the flanks. The duty of these outposts is to keep safe the other troops, to arrest any advance of the enemy till the troops have assumed the necessary formation, to reconnoitre the enemy, and to prevent being reconnoitered by him. With a body of troops on the march, the advance guard does outpost duty, and if the troops remain several days on a given spot the outposts are relieved daily, usually before day break.

The outposts are organised into picquets, supports, and reserves. Their strength depends on the nature of the country, on the strength and nearness of the enemy, and on the plans of the Commanding Officer, according as to whether he intends to defend the line of outposts lightly or obstinately; but the outposts will rarely exceed one sixth or one seventh of the total force. For small bodies of troops the reserves may be dispensed with. There should never be more troops sent on outpost duty than is absolutely necessary. Outposts, consisting of cavalry only, are put exceptionally when the enemy is far off, and the whole country can be easily overlooked;

as a rule the main burden of this service falls upon the infantry, who are aided by small detachments of cavalry to serve as orderlies and patrols. Artillery also is sent on outpost duty only exceptionally, and then only with the reserve; machine-guns on the other hand can often be employed with advantage with the picquets or with troops of support.

The PICQUETS form the main line of safety, and consist of tactical units, companies or half-companies; their strength is determined by circumstances. It is assumed, that on ground of usual conformation a Picquet of the strength of a company may safeguard a front of 450 to 900 yards. Every Picquet is aided by some cavalry-men doing duty as orderlies or patrols. The Picquets put out DOUBLE SENTRIES or so-called "Groups" to a distance of 100 to 400 yards. They consist of 3, 4, or 6 men each, with a non-commissioned officer for every 2 or 3 groups. Every group places one man as sentinel, whilst the others remain near, under cover. The sentinels are relieved every two hours (with great cold or excessive heat hourly). The double sentries are relieved by the picquet, the single sentries by the group. They are not allowed to sit or lie down or to take off their knapsacks, &c., and they fix bayonets only at night or in a fog. Every one approaching the sentinel is challenged by the cry:—"Halt! who goes there?" If the challenge is not attended to or the further commands of the sentinel are disregarded he fires immediately. In special cases, as, for example, when the flanks of a line of out-posts are to be secured, or an especial road is to be watched, or communication is to be kept up between two picquets, that are far apart "Detached posts" are formed; these consists of 6 to 12 men under a non-commissioned officer, who have to act in the same manner as the picquets. "Examining Posts" of 3 men each one of whom is under arms, and one should be, if possible, a noncommissioned officer acquainted with the language of the enemy's country, are distributed along the line of picquets, and strangers, bearers of flags of truce, and deserters can pass the line of outposts only at these points. The arms of a picquet are piled, and guarded by a sentinel; the men may neither take off their knapsacks nor leave their post. The regulations recognize three kinds of infantry severally designated as Reconnoitering Patrols, Visiting Patrols, and Strong Patrols. The former are pushed forward towards the enemy as far as possible, but as a rule never more than I mile. They may consist of 2 to 5 men, but the fewer the better.

object is to prevent a surprise, and to discover the movements of the enemy. Visiting patrols consist of a non-commissioned officer, and one man; they are sent from time to time by the picquet to visit the sentinels to receive reports, if any, and to keep up communications with the neighbouring picquets. Strong patrols are employed to drive back the reconnoitering patrols of the enemy, or to expel them from some section of the country, and to acquire information as to what is behind them. If it is impossible to gain the end by stratagem the patrol must advance with energy, and quickly retire as soon as their object is gained. They must rarely be pushed forward more than I mile beyond the line of posts, and it is especially necessary to send them out before day break, so that they may detect any columns of attack which the enemy might be sending out. Usually these patrols are drawn from the supports, and are accompanied by a few horsemen.

The SUPPORTS consist of one or more companies drawn from the same battalion to which the picquets belong. Every two or three picquets have a support, whose strength is about equal to the total strength of the picquets, and are posted between 400 and 800 yards to the rear of them. The picquets represent the main line of security, and the supports the main line of defence; these latter must therefore occupy a position as favourable as possible for acting on the defensive. To every body of supports are added two or more orderlies, and if possible communication is to be kept up with the picquets by flag-signalling. It may happen that the main line of security would also be the most favourable line of defence, and in that case the supports would be pushed forward into that line, if the enemy were to make an attack.

The RESERVE, if there be any, must occupy a favourable defensive position, or else it is posted so as to be readily at hand to re-inforce any threatened body of troops. The strength of the reserve varies from one half to one third of the number of troops on outpost duty, and it is posted between 400 and 800 yards to the rear of the supports, and I to 2 miles in front of the camps, bivouacs, or cantonments of the main body of troops.

At night it is considered sufficient to keep safe the roads and the lines of approach, by which the enemy may be expected, and in addition regular patrols are kept up between the posts and in the direction of the enemy. Unless a decided tactical advantage is to be gained (such as occupying a crossway, &c.), it is forbidden to

abandon at night a line of outposts held during the day. The outposts must be under arms an hour before day break, and must stand in readiness till broad day, to make sure, that nothing unusual is going on in the lines of the enemy.

A Superior Officer is appointed as COMMANDER OF THE OUTPOSTS. He selects the general line of outposts, divides it, if necessary, into sections of about 3 miles each for cavalry, and 1 to 1½ miles for infantry; he appoints the commanders of these sections, and issuess the orders for the outposts. The commanders of the sections select the positions of the picquets, and of the supposts, distribute the front among the former, and take all the measures needful for the defence of their section and for the observation of the enemy.

OUTPOSTS OF CAVALRY are placed on the same principles as those of infantry, only the picquets are usually weaker but more numerous, and rarely consist of more than a single troop; a squadron supplies two picquets and a troop in support. Double vedettes are pushed forward from the picquets for a distance of 300 to 600 yards (these are the so-called Cossack posts of 3 men each), who follow the regulations described above for the infantry.—The other men do patrol duty, and it is assumed, that on grounds of usual conformation a picquet of the strength of a troop can guard a front of I mile in extent. Only one third of the number of horses of picquet may be fed or watered at the same time. The saddles are never taken off, and only by day, if every thing is quiet, may the girths be loosened somewhat. Detached posts, consisting of a section, and reconnoitering, and visiting patrols are sent off in the same manner as with the infantry, but to greater distances.

# f. Quarters.

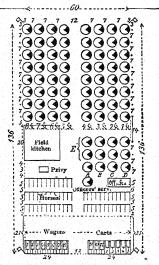
In the field the troops are quartered in tentcamps, bivouacs, or towns and villages. As a rule British troops take tents with them in their campaigns, as in those countries, where their operations are mostly carried on, inhabited places are rare, and bivouacs can obviously only be regarded as makeshifts. The army tent, the so-called Bell-tent, is conical in shape, and has low walls. It weighs 69 to 74 lbs., is about 10 ft. high, and has a diameter of about 18 ft. It can accommodate 15 men, who lie stretched on the ground, like radii of a circle with their feet towards the tent-pole.

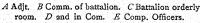
CAMPS are pitched according to the available space with opened

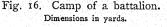
or closed intervals between the tents. The minimum space for camps for various units on a war-footing are as follows:—

	Breadth	Depth
	in ya	ırds
For I battalion of infantry	. 60	136
" I regiment of cavalry	. 100	150
" I field battery	. 80	158
" 1 ammunition-column, or compan	y	
of army service-corps	. 80	175
" I company of field pioneers	. 50	148
" r company Army Medical-Corps.	. 60	100
" I field hospital	. 70	160
" I staff of brigade	. 30	50
" I staff of division	. 50	80
" the staff of an army-corps	. 100	130

If possible, there is to be an open space of about 60 yards in front of the camp to serve as an Assembly ground. Figs. 16, 17 and 18







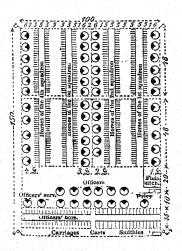
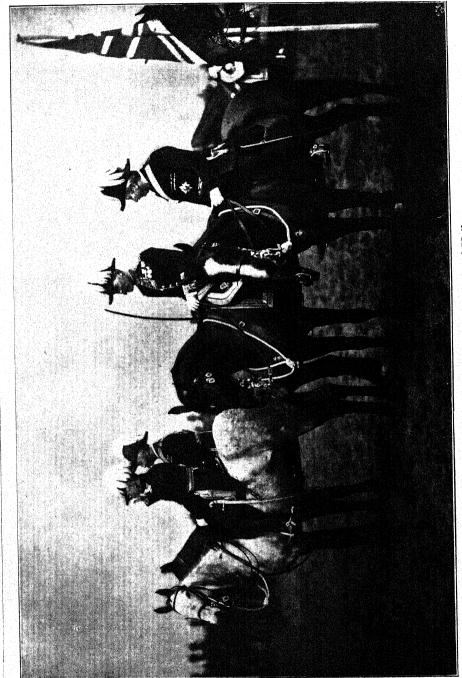


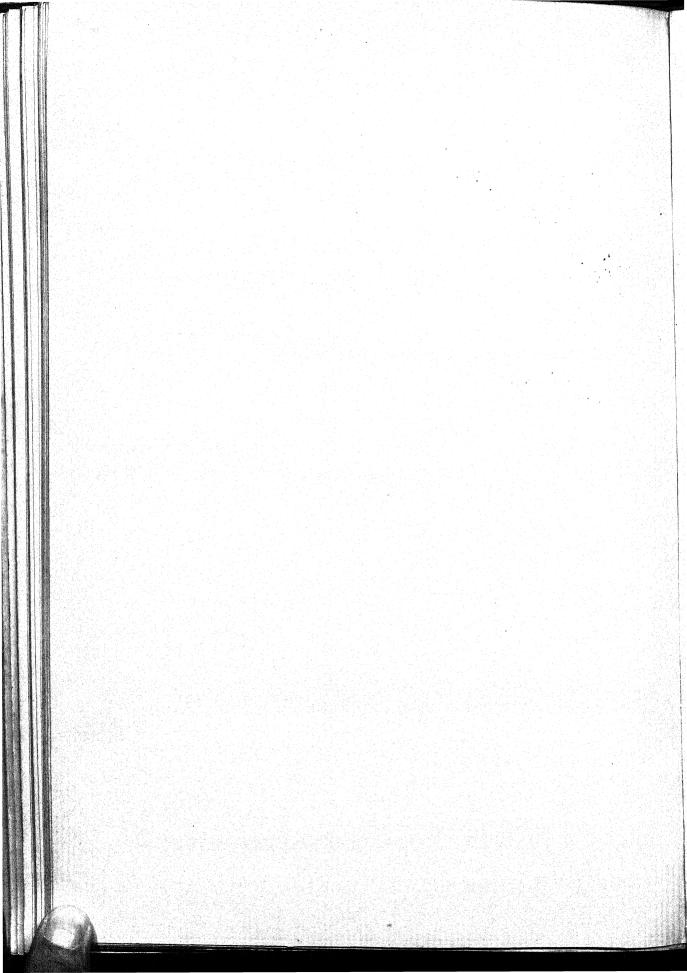
Fig. 17. Camp of a regiment of cavalry.

Dimensions in yards.

exhibit examples of minimum camps for a battalion, a regiment of cavalry, and a battery of field artillery. It is to be observed that the Commander may at his discretion order the Field kitchens to be placed "elsewhere, according to the direction of the prevailing wind,



Field Marshal Viscount Wolseley Major General Lord Methuen General Sir E. Wood, Quartermaster General at an inspection



and that the position of the privies is to be determined by the position of those of the camps of other bodies of troops, by the time, during which the camp is to be occupied, and by the position of

The tents are surrounded by the wells. trenches to carry off the surface-water. locating the camps for larger bodies of troops, cavalry and artillery are never to be placed at the wings. The engineers lie near the staff of the Division, &c., and the infantry are located according to military ne-Ammunition-Columns must under no circumstances be encamped in the first Line, and the victualling-magazines must be fitted up near a good road or highway. If the available space is short of the required depth it will be advisable to encamp the units by the side of each other on a narrower front.

The camping places are indicated by an Officier of the General Staff. On arrival at its place of encampment the unit halts; mounted men dismount, arms are piled, and orders are issued respecting the position of

Privy Smithy

Privy Smithy

Privy Smithy

Fig. 18. Camp of a battery of Field-artillery.

Dimensions in yards.

kitchens and privies, fetching of water, and receiving food, and fuel. As soon as the carts containing the tents arrive the erection of the tents is taken in hand. The horses are tethered with halters to the stable cord running along the ground, and their hindlegs also are made fast with cords tied to pegs driven into the ground behind them. Harness and saddle are deposited on the ground behind these pegs.

BIVOUACS are camps without tents, but arranged on identical principles. Their minimum dimensions are the same as in tent-camps, except that a battalion bivouacs differently, and requires a front of 80 yards. An open column is formed with its right wing on the right flank of the place of bivouac; next arms are piled. The front and rear company bivouac near their rifles, the others on the same base-line to the left of their rifles.

In billeting, the troops are lodged either in "usual" or in close quarters; the former, if the inhabitants can or ought to be treated with consideration, the latter if this is not the case. In usual quarters

all the troops are lodged in houses, in close quarters as many as possible are lodged in houses or barns, and the rest bivouac in gardens, fields, &c. Such village bivouacs are formed only, if it is necessary to hold the troops concentrated for a march or an engagement. The quarters are distributed amongst the units according to districts, villages &c., and if possible, they are previously taken over by quartermasters, who are commanded by an officier charged with the distribution of the quarters amongst the units. The quarters are to extend more in depth than in breadth, and the tactical combinations must, as much as possible, be kept in view; it may, however, be necessary to locate various arms together, so as to utilise all the stabling. The villages or quarters nearest to the enemy are given to the infantry. Staffs must lodge in places, which can easily befound, and are near good roads of communication. All troops must have places of assembly assigned to them, and measures must be devised to provide against an outbreak of fire, and to guard the health of the troops.

For very large camps a Lieutenant-General aided by an Officier of the General Staff is appointed as Commander, and for every separate part thereof a Major-General with an Officier of the General Staff on duty for the day. With every brigade there is a Field-Officier, an Adjutant, and a Quartermaster; with every battalion or regiment of horse a Captain, and a Lieutenant on duty for the day. The Generals are charged with the superintendence of the general order, and discipline in the camps. They visit the outposts, unless a special officer has been put in command over them, and they receive all the reports. The Field-Officiers on duty for the day superintend the posting of camp-sentinels, and visit them both by day and night; they are in command of the inlying piquets, and give orders if the camp is to be patrolled by them. The Adjutant on duty for the day is at the disposal of the Officier of the General Staff of the brigade, and the Quartermaster on duty watches over the general cleanliness of the camp of the brigade. The captain, and the lieutenant on duty have charge of the inner service of their battalion &c.

### g. Field-fortification.

The regulations for the drilling of infantry only recognise two kinds of sheltertrenches, viz:—the half hour (Fig. 19), and hour (Fig. 20). Both are arranged for infantry fire kneeling; they have breastworks  $1\frac{1}{2}$  ft. high, and the trenches are  $1\frac{1}{2}$  ft. deep. The width

of the trench is  $2\frac{1}{2}$  ft. for the half hour, and 5 ft. for the hour. In an average soil, and with an interval of 2 paces between the workmen



Fig. 19. Half hour shelter trench.

Fig. 20. Hour shelter trench.

the half hour trench as its name indicates can be dug in half an hour; the hour in double the time. Later on, the pits may be deepened

and widened. As a rule the rifle-men are posted in the trenches in single file, but the wider trenches afford cover for their officers also, who otherwise would have to lie behind them.

Gun-pits can be either deep (Fig. 21), or embankments thrown up on the level ground known as epaulments (Fig. 22). The former are constructed in 30 to 45 minutes by 10 labourers working with shovel, and pickaxe, the latter by 8 labourers in about a couple of hours. The details of construction are shewn in the figure.

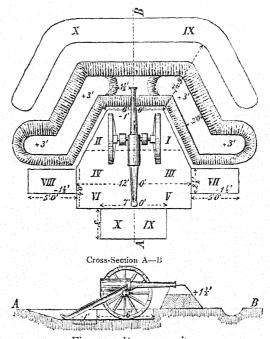
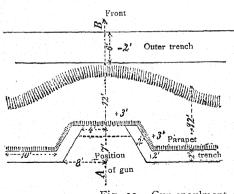


Fig. 21. Deep gun-pit.

Dimensions in feet. The Roman figures units of work.

### h. War against Savages.

Hardly a year goes by but the regulars of the British army have to wage some war against savages, and therefore the study of the tactics to be adopted against such enemies is to them of the greatest importance. It is hard to draw the limits of this study, because the



enemies, which the army has to encounter in the mountains of Afghanistan, and the northwestern frontier of India, in the forests and jungles of West Africa, in

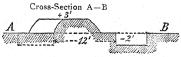


Fig. 22. Gun-epaulment on level ground.

the deserts of the Soudan, and in the arid table-lands of South Africa differ completely in their tactics, and must be combated on totally different principles, and methods. The question of the tactics to be adopted depends mainly on the arms possessed by the enemy. Savages armed only with spears, and shields put their trust in a desperate onset, and hand to hand figthing, but those possessed of fire-arms prefer fighting at long range. The nature of the ground too, determines the tactics; on the mountains, and in jungles loose formations only are possible, but in the plain, and in the desert close formations appear to be necessary. In every case the conformation of the ground, and the nature of the enemy to be combated must be taken into account before determining on the tactics, and mode of warfare to be adopted.

In all wars against savage races it is noticed that the enemy makes decided efforts to operate against the rear and the flanks of the regular troops, which necessitates the formation of more or less flexible squares both in marching and in the engagement. The object of a close square where the infantry stand shoulder to shoulder is to receive the assault of an enemy (such as the Zulus, and the Soudanese) who rely on a hand to hand fight. The march in such squares presents great difficulties, partly because the space within is too limited to receive the huge number of carts and baggage animals that accompany such a body of troops, and partly because the movements of a square on ground which is uneven or covered with vegetation must be accompanied by some disorder, or disarrangement. The endeavour is made to diminish those difficulties by the following practice: When a battle is about to begin the baggage is left behind in a

fortified camp, whilst the square advances unhesitatingly against the enemy. It is seen then that the square is both an aggressive, and a defensive formation. The artillery is usually posted in the corners of the square, the cavalry remains outside it, and the reserves within are placed in small sections along the sides or the corners. The more flexible and looser squares, where the men do not stand shoulder to shoulder are formed in cases, where the enemy shews no inclination to fight at close quarters, but makes use of his firearms at a certain distance accompanied perhaps by small local assaults. In such contests the troops engaged form a more or less dense line of rifle-men surrounding the baggage, and they rely on their weapons, and on their moral superiority.

It frequently happens that troops, albeit advancing strategically on the offensive, still await the tactical assault of the enemy behind fortifications, such as Zaribas (abatis) or a Lager of carts. This warfare is bad for the moral tone of the troops, because it paralyzes their aggressive spirit, nevertheless the vastly superior numbers of the enemy, in comparison with the small number of troops, as was the case in the Zulu-war and in Matabele-land, may render this warfare necessary. In both these wars such Zaribas, and Wagon-lagers were constructed every evening for the protection of the troops, and later they served as stages in the line of communications.

The savage is fond of plots, and stratagems, and must be treated, and combated in the same manner. At times therefore a retreat is feigned to entice the enemy to quit his strong position, and put him in disorder; the troops then wheel round, and attack him. Cavalry and artillery are best fitted for the execution of this manœuvre, as is proved by the history of the Indian mutiny. On occasions the enemy is led into an ambush, and feigned attacks are also made to hide from the enemy the real point of assault, and no means are neglected to force him into grounds that are unfavourable to him.

Offensive tactics are obviously the safest for regular troops. A defensive formation, such as squares, may sometimes be adopted; in such cases the troops await the assault of the enemy; but when he is repulsed, the troops must advance upon him, and utilize the success gained to the utmost by taking his position by storm. Offensive tactics in warfare against savage tribes is essentially different from those in civilized warfare, as a preparation for the assault by artillery is usually neither useful nor advisable. The object of closing with the enemy is frustrated by the artillery fire, ere the infantry has

had time to come into action. Should the enemy be in possession of artillery, then the aim must be to capture his guns, because all savages superstitiously attach too much importance to the possession of these weapons. In most cases then the principal object will be as quickly as possible to inflict a decisive defeat upon the enemy. For this end turning or flanking movements are of great importance. savages feeling very nervous about their communications. An attack on the flanks must be executed with great secrecy, as otherwise the enemy speedily abandons his positions, and retires, ere the expected success has been secured. In Afghanistan attacks on the flank were generally combined with a feigned attack in front, which afterwards was converted into a real attack. To draw the fullest advantage from a victory pursuit is always necessary: if therefore the country is at all favourable for the employment of cavalry or mounted infantry such troops should never be absent, the enemy being, as a rule, easily able to escape from the pursuit of infantry. Deep formations are not necessary in delivering an attack, as the first line (a line of riflemen) usually loses but few men, and consequently rarely stands in need of support. Reserves are required only to resist a sudden onset, which causes gaps in the first line.

Regular troops will rarely act defensively in a war against savages, but if they are compelled by circumstances so to act, every effort must be made to deliver also offensive assaults both to encourage the troops, and to shew to the enemy that the superiority is still maintained. In a defensive contest the flanks are always the weakest points, because the enemy instinctively endeavours to avoid the troops in front, and turns upon those at the flanks. It is necessary to provide for their defence either by retaining some troops in echelon, or by other measures.

As has already been pointed out the usual deep formations of infantry are not advisable in war against savages; on the contrary, the front rank (line of riflemen) must be powerful enough to repulse all hostile assaults by their own strength. In the Zulu war a detachment was annihilated at Isandlhwana, because the endeavour was made to resist an attack of the enemy in loose order. The infantry will mostly remain in close formation, and advance steadily so as not to weary the men uselessly, and to maintain order. Special stress is to be laid on fire discipline, the ammunition being of supreme value. The firing is exclusively by volleys and at short ranges. What the savages dread most is a bayonet charge. Although superior to

regular troops in single combat, yet they are unable to resist such a charge from want of the necessary discipline; usually they are already morally conquered, ere bayonet, and butt-end have come into play.

The necessity of having mounted troops available for pursuit has already been mentioned, but there are also other cases such as raids and protection, for which cavalry is indispensably necessary. The opportunity for delivering an attack in close array rarely occurs, as the enemy usually avoids it, but manœuvring capacity and discipline confer decisive advantages on regular cavalry, even against largely superior masses of irregular horsemen, as was proved in 1860 in the China war. In desperate charges by fanatics the cavalry must keep apart from the infantry both to be able to act against the rear and flank of the enemy, and to prevent being involved in the retreat of the infantry, in case it should have to fall back. In fare war against savage races, especially in pursuit or in attacks on scattered masses, the lance is the best arm of the cavalry. If an opportunity offers to fight on foot the cavalry must not hesitate to dismount, and Mounted infantry is a highly valued engage in such a contest. auxiliary of the cavalry, affording as it does the cooperation of a very mobile infantry. Men on camels form a kind of mounted infantry, but the only advantage they enjoy is that they can traverse long distances over waterless regions.

Concerning the tactics of the ARTILLERY it has already been mentioned that the usual regulations for delivering an attack are not observed. The guns are to be pushed well forward, and worked with resolution and boldness, the moral effect of artillery being very great, and their material effect often indispensable at short ranges, for the purpose of making breaches in lines of pallisades, or of repulsing sudden onsets by case-shot. It is easily possible to push the guns into close proximity of the enemy, as their musketry fire is mostly very harmless. The necessity of combining the guns in heavy masses does not arise; on the contrary it is desirable to have guns ready at hand, wherever they can be usefully employed.

In defensive action the artillery is of great value both for giving the infantry a *point d'appui*, and for the moral superiority it establishes. An abundant supply of case-shot is specially necessary.

The placing of outposts presents very great difficulties in a war against savages. Night attacks are little to be apprehended, but night skirmishes and attacks upon single sentries are part of the tactics of many races, and it is just this, which renders the outpost

duty so dangerous and difficult. It frequently happens that a detachment of troops is attacked on all sides, and must be protected by outposts all round. This measure makes it necessary to employ a proportionately large number of men, in consequence of which the outposts have to be placed closer to the camp. This reduction of distance is not necessarily a great disadvantage, as the outposts are not, as a rule, intended to resist an attack, but only to alarm the troops, and then to retire. If they have to move over a great distance, they are in obvious danger of falling into the hands of the enemy, and as in such wars the men sleep under arms, a short alarm is sufficient to put them in array.

Night attacks upon savages are made but rarely, because the country is mostly unknown, and the danger of disorder and panic might be too great. If, however, they appear necessary, the several orders must be executed with great precision, and it is an established principle that the work must be done with cold steel. Attacks at dawn are frequently successful, because just then savages also are least watchful.

The field-fortifications mostly used are such, as present obstacles to the fury of a hostile onset rather than afford cover againt fire. The first condition is an open field, and flanking defence of the obstacles is of special importance. But it is always to be kept in view, that the nature of the defence must invariably be adapted to the nature of the attack, and that in a war against savages offensive operations are of supreme importance.

# III. Training of the Troops.

# a. Regular troops.

### I. INFANTRY.

The infantry recruits receive their first training at the depôt of their regiment, and this training lasts at least  $2\frac{1}{2}$  months. The recruits are then passed over in detachments to that battalion of their regiment which is on duty in the United Kingdom, and all the men of a detachment are enrolled in the same company to continue their training. This transfer of the men happens eight times in the year, viz:—on the 7th of January, on the 21st of February, on the 7th of April, on the 21st of May, on the 7th of July, on the 21st of August,

on the 15th of October, and on the 21st of November. The preliminary training of the recruit at the depôt is to be advanced so far, that on arrival at his battalion he is to be fit to be put in the front-rank of his company. He is then to pass through a twelve weeks' training of 20 hours in each week, which is regulated as follows:—

- 1st and 2nd weeks: Gymnastics with appliances 10 hours, ditto without appliances 10 hours, individual marching drill, turning, saluting 16 hours, oral instruction 4 hours;
- 3d and 4th weeks: Gymnastics with apparatus 10 hours, ditto without apparatus 10 hours, drill in sections in single file 14 hours, fitting on accourtements for marching order, and kit inspections 2 hours, oral instruction 4 hours.
- 5th and 6th weeks: Gymnastics with apparatus 10 hours, ditto without apparatus 8 hours, drill in sections in two ranks 8 hours, manual and bayonet exercises 6 hours, oral instruction 4 hours, and drill in marching order 4 hours;
- 7th and 8th weeks, as in the 5th and the 6th weeks, and also two marches of 2 hours each with rifle accourrements and cape, but without knapsack and cloak;
- 9th and 10th weeks: Gymnastics with apparatus 10 hours, ditto without apparatus 8 hours, sentry duty 6 hours, drill in marching order 2 hours, and oral instruction 4 hours; in the 9th week a march of 3 hours, dress as above; in the 10th week ditto with full equipment but empty knapsack;
- 11th and 12th weeks; Gymnastics with apparatus 10 hours, ditto without apparatus 8 hours, drill 16 hours, drill in marching order 2 hours, oral instruction 4 hours. In addition 2 marches of 3 hours each with full equipment for marching order in war.

The subjects of the oral instruction are prescribed in the regulations, and extend to all the branches of the infantry-service. The instruction is imparted by sergeants under the superintendence of an Officer.

The recruits are instructed in target-practice by the sergeant instructor in musketry under the superintendence of the Assistant Adjutant of the battalion. The targets used are rectangular in shape, made of iron or canvas and are painted white. In the centre is a black bull's eye, round which a concentric circle is drawn, invisible to the marksman. The dimensions of the targets are:—

	Diameter of		
	of the target	Bull's eye	Circle
Target No. 3	4 ft. 4 ft.	1 ft.	2 ft.
" No. 2	6 ft. 6 ft.	2 ft.	4 ft.
"No. I	6 ft. 8 ft.	3 ft.	5 ft.

The targets for volleys and field practices are sectional targets 4 ft. high, and 8 ft. wide, and are painted with 4 black outlines of a rifleman in kneeling position. In addition there are for field practices moveable, vanishing, and other targets; and the Commanders are authorised to order for these practices suitable targets. At the above targets a hit of the bull's eye counts 4 points, within the circle 3, and outside it 2 points. A hit on the target of a figure target counts one point.

The preliminary drills for recruits consist of aiming, musketry drill, distance judging, firing with Morris tube (21 shot), firing with blank cartridge (7 shot independent firing, and 7 shot volley firing). These drills last eight days. The actual course of target-practice for recruits is as follows:—

Number	ot Practice	Mode of firing	Target	Distance in yards	No. of rounds	Position of firing
	( 1	Individual firing	No. 2	200	7	Lying
	2	.,, .,	" 2	200	7	Kneeling
	3	,, ,,	" 2	200	7	Standing
	4	,, ,,	, 3	200	7	Lying
-	5	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 3	200	7	Kneeling
Part I.	6	,,	,, 3	200	7	Standing
Pa	7	"	,, 2	300	7	Lying
	8	) <del>,</del>	" 2	300	7	Kneeling
	9	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,, 2	300	7	Standing
	10	99	,, 2	400	7	Lying
	11	,, ,,	" 2	400	7	Kneeling
	(12	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	" I	500	7	Lying
=	13		,, I	500	7	Kneeling
. E	14		" I	600	7	Lying
Part II	15	,,	, I	700	7	
	16	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,, I	800	7	
	(17	Rapid individual	, 2	200	7	Kneeling
Part III.	18		" 2	200	7	Standing
Ħ	119	100 100 100 100 100 100 100 100 100 100	" I	500	7	Lying
<u>Б</u>	20	,	,, I	500	7	Kneeling
	[21	Deliberate volleys	1	300	7	Front rank kneeling
	22	Deliberate independent		300	7	,,
>	23	Rapid	Sec	300	7	Single rank kneeling
Part	24	Deliberate volleys	Sectional	500	7	77
Ра	25	,	ma	600	7	Single rank lying
	26	Rapid volleys	<b>   </b>   -	300	7	Front rank kneeling
	27	, ,	<b>   J</b>	500	7	Single rank kneeling
			1			

In all, the recruit fires 189 rounds. If he makes 175 points in part I, he may go on to part II, but if not has to fire through part I again with the next party of recruits, and extra ammunition may be drawn for him. If in all he makes 330 points he is classed as a 1st class recruit shot. As a rule not more than 14 rounds are fired on one day exceptionally 21 may be fired.

Between the 1st of March, and 31st of October every company is struck off all other duties, in order to be trained by its own officiers in all branches of field-service. With the exception of the men, who have served for more than 17 years, every one must go through this course with his company, and for this purpose all the men, who have been put on special duty, are relieved. There are appointed 20 days of practice, distributed as follows:—

The company in an engagement, attack,	an	d	
defence. Ammunition supply		. 4	day
Outpost and sentry duties on the march .		. 2	
Field fortifications		. 2	"
Patrolling and reconnoitering		. 2	,,,
Outposts		. 3	"
Pitching tents, bivouacking	•	. 2	29
Bridging	•	. 2	72
Engineering		. 3	, ,,

After the course is finished the company is inspected by the Commander of the battalion, who reports the result to the next higher authority (Commander of brigade, or district).

Target practices for trained men usually begin on the 1st of March. They are carried out by companies under their own officiers, and all soldiers join. Men detached on special duty are relieved for that purpose, and recruits too, who have passed through the course of target practice are ordered to take part in them. The preliminary practices last two days, and are the same as those for the recruits, but no Morris tube, and blank cartridges are fired off. The annual course of target practice for trained soldiers is as follows:—

Number of Practice	Mode of firing	Target	Distance in yards	No. of rounds	Position of firing
Part I. 2 3 4 5 6 6	Individual firing  """  """  """  """  """	No. 3  " 3  " 2  " 2  " 2  " 1	200 200 500 500 600 800	7 7 7 7 7 7	Kneeling Standing Lying Kneeling Lying

Number of Practice	Mode of firing	Target	Distance in yards	No. of rounds	Position of firing
The d	Deliberate volleys Rapid volleys Rapid independent Deliberate volleys Rapid volleys Rapid independent Deliberate volleys Rapid volleys Rapid volleys Rapid volleys	Sectional	300 300 300 500 500 500 600 600	7 7 7 7 7 7 7 7 7 7 7 2 I	Front rank kneeling  Single rank kneeling  In single rank lying  """  As found necessary

In the whole course 119 rounds are fired. A man, who makes 105 points becomes a "Marksman", 60 points place him in the 2nd class of riflemen, below 60 points in the third class. 150 rounds of ammunition are allowed for each trained soldier of which 40 are kept at the disposal of the company and 41 at that of the battalion commander for such practices as they may deem fit. Not more than 14 rounds in individual or 21 in collective practices should be fired in one day, and 28 is the maximum allowed. 400 rounds for each battalion may be drawn for field firing under the order of the General Officers commanding. For every recruit, who has passed the course of target-practice 1/- is allowed, for every trained soldier 2/6. With these amounts the Commanders of the district or brigade create, at their own discretion, money-prizes to be distributed by the Commanders of battalions amongst the good shots. As a prize of honour all marksmen wear on the lower sleeve of the left arm the rifleman's badge of two crossed rifles embroidered in gold, and the best marksman of the company has the same badge with a star above it embroidered in gold. All the sergeants of that company which makes the best practice in the batallion wear on the lower sleeve of the right arm a badge of two crossed rifles with a crown above them embroidered in gold.

Between the 15th of October, and the 15th of March marching is practiced. Once at least, but usually three times in every week marches are executed, which gradually rise from 9 to 16 miles. The men parade in marching order, but the Commanders of battalions may at their discretion reduce the weight to be carried by the younger soldiers.

Every battalion is inspected once a year in the month of July by the Commander of the district or brigade, and on that occasion the inner arrangement and interior economy of the battalion are also inspected. The inspection lasts several days, and comprises all the branches of the service, on the drill ground, in the surrounding country, and in the barracks. The result of the inspection with individual reference to all the officers is reported to the Adjutant-General.

This much is obligatory in accordance with the regulations concerning the training of the infantry; all the rest is left to the discretion of the Commanders of Districts. The circumstances of the districts are so different, that it is impossible to lay down general rules beyond those mentioned. As in the United Kingdom troops are not allowed to trespass on private property without the owner's consent or the district being declared available for manœuvres, the troops of some garrisons are restricted to their drill-grounds. others, as in the large camps at Aldershot, and on the Curragh and on Salisbury plain extensive tracts of land are available, being property of the state, and there alone it is possible to carry out a correct system of training. In the camp at Aldershot the plan of training pursued is somewhat as follows:—From the 15th of October to the 1st of March marching is practised three times a week, first by battalions, and then by brigades. Once a month all the troops of the district engage in a route march, and in the last week of this period six marches, of no less than 16 miles each, are made by brigades on six consecutive days. From the 1st of March to the first of May four compaines from each battalion are relieved from the discharge of all other duties to enable them to pass through a four weeks' course of field duties; the other companies are engaged with target shooting, which is practised during the whole summer. In the month of May the battalions are drilled by their Commanders. During the month of June the brigades are kept at the disposal of their Commanders, and at their request cavalry and artillery is added to execute manœuvres in the country, but the practices on a large scale, as ordered by the Commander of the District, do not begin before the end of June. Similar systems are also observed in other districts as far as circumstances allow.

From every battalion of infantry men are told off for special courses of training:—

To the School of musketry at HYTHE: — One officer, and one sergeant twice a year. The course lasts 6 weeks.

To the Engineering School at CHATHAM: — Officers and men according to requirement. Every battalion must possess at least one lieutenant, and one sergeant, who have passed through a course of field fortification, and similarly all the pioneers of the battalion must have passed though the same course.

To the Signalling School at ALDERSHOT:—Officers and men also according to requirement:—Every battalion must possess at least one lieutenant and two non-commissioned officers, who hold certificates from this school.

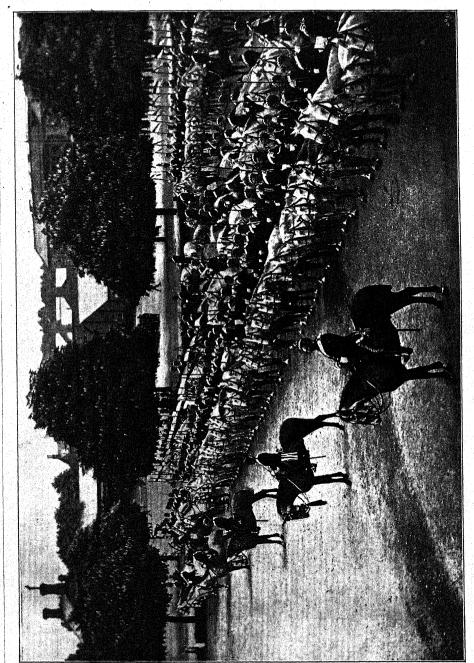
To the Artillery and Army Service-Corps:—A number of non-commissioned officers, and men to be trained as drivers to serve with the baggage of the battalion in case of mobilisation. The course lasts about 10 weeks.

MOUNTED INFANTRY:—From every battalion there are sent about every two years I officer, I sergeant, I to 2 corporals, and about 30 men to Aldershot or to the Curragh to be trained for service with the mounted infantry. The detachment from one battalion forms a section of the company; the course lasts  $2\frac{1}{2}$  months, and when it is finished the men return to their battalion. (See:—First Section, Ch. II a).

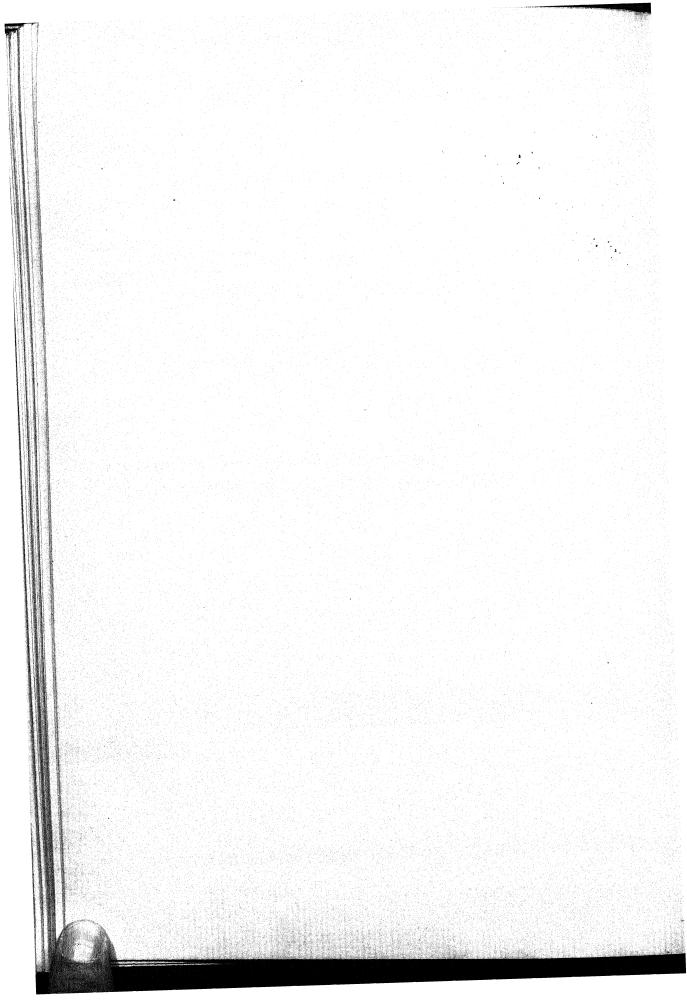
AMBULANCE MEN:—From each company two privates are trained by a surgeon as ambulance-men. The courses, which last 2 weeks are held in spring; garrison by garrison.

#### 2. CAVALRY.

The cavalry recruit receives his first training with his regiment, or at the depôt, if the regiment is in garrison outside the United Kingdom. Before he is allowed to get on a horse he is drilled on foot, and he is taught gymnastics, stable work, and the use of arms on foot. The recruits are taught drill by the adjutant of the regiment, fencing (about 70 lessons) by the sergeant instructor in fencing, gymnastics (1 hour a day), and stable work by the officers of the squadron. These branches of training require about two months, and then commences riding drill, which requires 90 to 120 hours. In combination with this training the recruits are instructed in stable work, saddling, packing, and the use of arms on horseback. Drill on foot is given in the afternoon, and oral instruction in the evening; After 6 or 8 months musketry instruction is taken in hand, and this



"Royal Scots Greys" (Drill Order)



is identical with that of the foot-soldier. The horse-soldier however need only make 155 points to pass through part I and 300 points in all to be a 1st class recruit shot. When the musketry practice is finished the recruit is enrolled in his squadron as a "trained soldier."

The remounts, which constitute about 10% of the strength of the establishment are broken in by the riding master of the regiment. During their first year the horses are considered remounts, and are entrusted to picked men. Riding with curb bits begins after four months, and then the riders of remounts put on arms for the first time. When the horses are broken in they are passed on to the squadrons.

In winter all the trained cavalry-soldiers go through a recapitulation course in riding and drill on foot, which lasts about three weeks. In the evening the officers give lectures to the men on the services of the cavalry in war.

As is done with the infantry, so also in the cavalry, every squadron is for a certain time relieved from all other duties, in order to be taught by its own officers squadron-drill, and the duties in the field. This course is divided into two periods, viz:— the winter-course and the spring-course; the former lasting from the 15th of October to the 15th of March, and the latter from the 16th of March to the 31st of May; every course lasts three weeks. For the winter course the squadrons are set free by turns, singly; for the spring course they are set free in pairs. All the non-commissioned officers (excepting two cooks for each squadron, and a servant for each officer) must go through the course. The winter course comprises riding across country, manipulation of arms, fighting on foot, outpost duties, duties in the camp and in bivouac, fencing, and oral instruction. The spring course deals exclusively with squadron drill and field service. These courses occupy 4 to 5 hours in the morning, and 2 to 3 hours in the afternoon, when other branches of the service not concerned with riding are to be practised. After the spring course the squadron is inspected by the officer in command of the regiment, and the results of this inspection are reported to the Commander of the district (brigade). During the winter the non-commissioned officers, and men are instructed by the officers of the squadron in reconnoitering service, reading of maps, map drawing, patrol duties, making reports, &c.

The Target practice of the men usually begins early in March, and lasts the whole summer. The drills, and the number of rounds

allowed, and to be fired, are the same as with the infantry except that Nos. 7, 8, and 9 are omitted. To be classed as a Marksman the cavalry-soldier must make 120 points, to gain the second class 95 points, and the third 50 points; 150 rounds are allowed for each cavalry soldier, and 1000 rounds per regiment for field firing and extra training of 3rd class shots. The non-commissioned officiers &c. armed with revolvers, fire 48 rounds at a distance of 30 paces. The shooting prizes are the same as with the infantry. The badges for fencing are:—for the best fencer of the regiment, crossed lances or sabres with a crown over them embroidered in gold; for the 1st and 2d best in each squadron, the same embroidery but without the crown, and for the other men the embroidery is in wool. These badges are worn on the lower sleeve of the left arm.

Every regiment of cavalry is inspected once a year in the month of April by the commander of the district (brigade) in accordance with the regulations in force for the infantry. The inspections bear more upon the internal administration, discipline &c. of the regiment, whilst the inspection by the Inspector General of cavalry, made in June and in July, refers to efficiency in training.

As with the other arms so also with the cavalry there is no special course of training prescribed, but regimental drill usually begins in the month of June, after squadron-drill is finished. Whether this is to be followed by brigade and other drill depends on local circumstances.

From every cavalry regiment the following are sent off for special courses of training:—

To the riding school at CANTERBURY, sergeants, and corporals to be trained as riding masters. The riding masters of the cavalry are selected from them. The duration of this course is undetermined;

To the musketry school in HYTHE, an officer, and a sergeant once a year for six weeks;

To the engineering school at CHATHAM, an officer once a year (on about the 15th of September) for the pioneer course for cavalry officers; this lasts 20 days. After his return the officer trains for a fortnight the pioneers of the squadron (12 men for each squadron);

A sergeant as assistant instructor once a year on the 1st of March; this course last 20 days;

To the signalling school at ALDERSHOT; the same as with the infantry. The instructors taught in this school afterwards train the 12 signallers of the regiment;

To the veterinary school at ALDERSHOT, an officer twice a year for a one month's course in veterinary studies;

A farrier-sergeant and a farrier twice a year for a two months' course in horse-shoeing, and veterinary studies.

#### 3. FIELD ARTILLERY.

The recruits of the field artillery are trained at the depôt for eight weeks in drilling on foot, in gymnastics, and in physical exercises, and are then transferred for further training to the batteries in detachments of 10 men each. At the batteries begins the special education of the artillery-men as gunners, and of the drivers in riding and driving.

At the battery the recruits are received and instructed by a picked officer of the battery. The course consists of II lectures on the theory of firing, and of  $42\frac{1}{2}$  hours drill at the single gun. When the course is finished the men are no longer called recruits, but "young soldiers"; they now have to go through a further course of II lectures, and IO6 hours' drill at the single gun, and in the battery; also in manipulation of the ammunition, aiming, mounting and dismounting guns, packing wagons, loading of materials on railway trucks, construction of gun-pits, &c. They fire I4 rounds with the carbine at a distance of 200 yards. When this course is finished they are regarded as "trained soldiers", but during the course they are already taught stable work. The drivers have to receive 90 to I20 lessons in riding and driving, ere they are regarded as trained men.

In winter, whilst the drivers pass through a recapitulation course in riding and driving, the gunners are trained by sections. The course consists of 9 lectures on the theory of firing &c., and 51 hours' drill &c. for the "young soldiers." Every gunner, even those who have been detached and are relieved for a time, must pass through this recapitulation course. In addition, the batteries and detachments march out once a week for drill in the open; every other time in marching order.

The annual training of the batteries usually begins on the 1st of March. For that purpose the men are freed from all other service for not less than 14 consecutive working days; all the detached men are called in, and their places are filled by men from other batteries. Drill, exclusive of duties in the stable, is to last at least five hours a day. The time-table is as follows:—

From the 1st to the 4th day:—Drill on foot, and at the unhorsed gun—by single gun and by section; in the evening, lectures;

From the 5th to the 7th day:—Drill on foot by sections, and at the unhorsed gun, mounting and dismounting the gun, and manual exercise; in the evening, lectures;

On the 8th day: —Drill at the unhorsed gun in the battery, construction of gun pits, battery drill on foot, firing, packing of saddles in marching order, lecture by the commander of the battery;

On the 9th day:—Drill at the horsed battery, manual exercise, aiming practice under the commander of the battery, putting up tents;

On the 11th day:—Drill at the horsed battery, and examination of the gunners in the theory of firing, conducted by the commander of the battery;

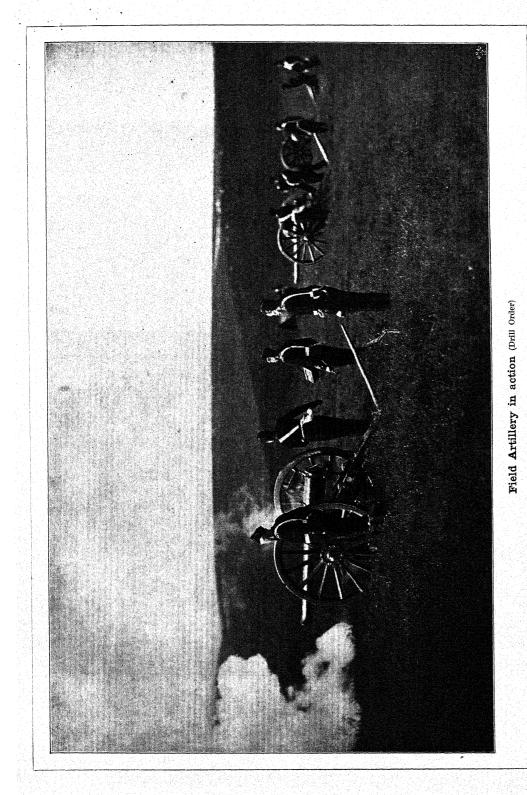
On the 12th day:—The battery is put on a war footing by combination with other batteries; it receives the mobilisation requisites from the artillery depôt, and is inspected by the commander of the Brigade Division in marching order for war;

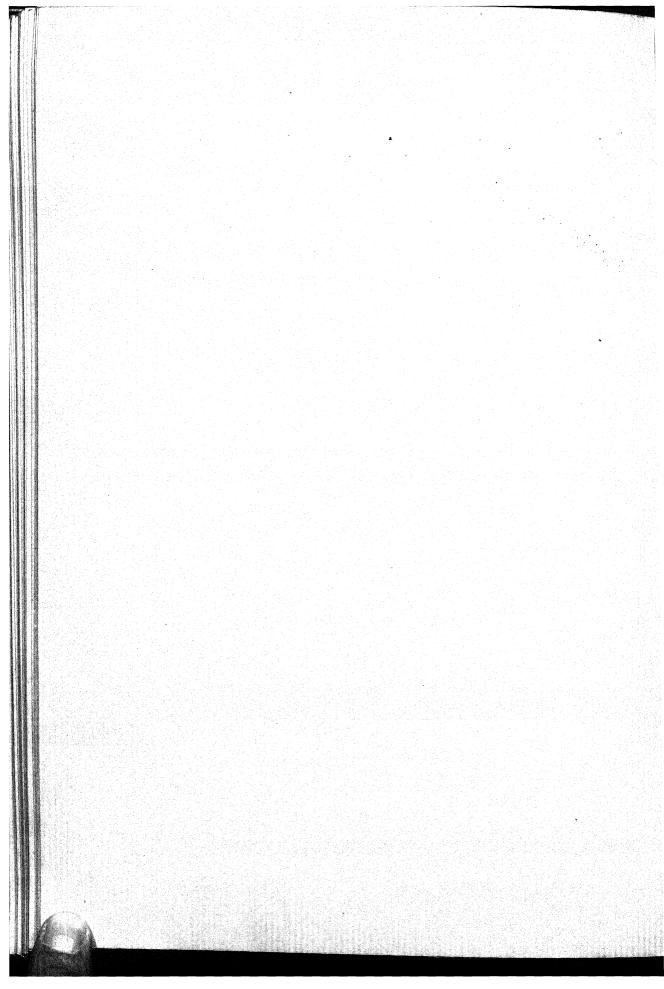
On the 13th day:—Entraining and detraining of the battery on a war footing;

On the 14th day:—The battery on the war footing marches out for a distance of some miles, takes up a position for action, fits up a tent-camp, cooks, waters and feeds the horses, and returns to barracks in the evening. The mobilisation requisites are returned to the artillery depôt on the following day.

During the whole of this time the other batteries, not engaged in the above course, drill as often as possible at the horsed battery, and when all the batteries have passed through the course the Brigade Division is practised by the commander, in drill, in taking up position, bringing up of ammunition &c.

At the beginning of May commence the target practices of the brigade divisions. There are five localities for that purposes:— at Okehampton in Devonshire, at Morecambe Bay in Lancashire, at Hay in Monmouthshire, at Glenbeigh in Kerry in Ireland, and at Shoeburyness. Each of these localities with the exception of Hay can accommodate a brigade division. At Hay mountain batteries only practise firing. Okehampton is the principal place for firing practice. Five brigade divisions spend there about three weeks each, every year, and the gunnery school of the field artillery from Shoeburyness is transferred to that place for the summer months. At Morecambe Bay only those batteries practise which have been located in the





north; at Glenbeigh those which are in garrison in Ireland, and the other brigade divisions practise a week each at Shoeburyness. The quantity of ammunition issued depends on the practising locality, and varies from year to year. The batteries firing at Okehampton receive each 400 to 500 rounds, whilst those at Shoeburyness receive only about 200 rounds.

When the firing practice is over, the brigade divisions participate in the drill of the other arms, and ultimately take part in the manœuvres, if any are held in their district.

Like the inspections of the cavalry, so also those of the field artillery are held first by the Commander of the district, and next by a superior artillery-officer. Since the abolition of the office of the Inspector-General of Artillery, these latter inspections are held either by the District-Commander at Woolwich, who is always an officer of artillery, or by the Commander of Artillery (Major-General or Colonel) at Aldershot, Portsmouth, or in Ireland.

Batteries who practise firing at the same range, and under similar conditions receive the following distinctions for good performances: The men of the best battery wear a gold-embroidered badge of 2 guns crossed, and surrounded by a laurel wreath; the second best the same badge, but without the laurel wreath, and the third and fourth batteries have the same badge, but embroidered in yellow wool. These badges are worn on the lower sleeve of the left arm for a year by all the non-commissioned officers and men of the battery, and in addition money prizes are awarded, viz:-£1 for the best sergeant, and for the 12 men, who have shewn most skill in aiming 10/- each and the badge of L (Layer); also 10/- each, and the badge G (Gunner) for the two best gunners, who have turned out first in the examination for theoretical knowledge of gunnery. The drivers of a battery receive money prizes of 40/-, 30/-, 30/-, and 20/for proved skill in driving, and in the keep of their horses and harness. All these badges are worn on the lower sleeve of the left arm.

Officers and men of the field artillery are sent to pass through the following courses:—

To the school of gunnery at SHOEBURINESS:—30 non-commissioned officers for a six weeks' course four times a year;

To the signalling school at ALDERSHOT: Officers and non-commissioned officers according to requirements;

To the artillery college at WOOLWICH:—35 men to be trained as saddlers, 47 as carpenters, and 47 as farriers. The duration of these courses is undetermined;

To the veterinary school at ALDERSHOT:—Four officers twice a year for a one month's course in veterinary studies; five sergeant-farriers, and 12 farriers twice a year for a two months' course in shoeing horses, and in veterinary studies;

To the artillery riding establishment at WOOLWICH:—20 non-commissioned officers and men once a year for 10 months for training as rough riders and assistant riding masters.

#### 4. GARRISON ARTILLERY.

The recruits for the garrison artillery like those for the field artillery are at first trained at the depôt for 8 weeks, and then transferred to their companies for further training. The course of training for recruits lasts 56 days. Drill at the gun only commences in the sixth week, and with it is combined oral instruction in the manipulation of the ammunition.

When the gunners have passed the recruits' course they are regarded as "young soldiers" and transferred to the 3rd class of gunners, and after further training they are promoted to the 2d or 1st class. According to their class they can be employed in various branches of the service, and thus earn additional pay.

Every company arranges a yearly course of instruction of its own, lasting 5 to 6 weeks, and treating of its own special department, such as service at sieges, on the coast, or in a fortress, and this is followed by target-practice. The courses of the siege companies are held at the range at Lydd in Kent, those of the coast companies at the works which they would have to hold in case of war.

The companies are inspected by the Commander of Artillery of the district in which they are stationed, and by the Commander of the district, as is the case with all other arms.

The special courses of instruction for officers and men of the garrison artillery are as follows:—

At the school of gunnery at SHOEBURYNESS:—24 officers, and 40 non-commissioned officers; the former 10, the latter 12 months a year; 6 officers and 30 non-commissioned officers four times a year, each for three months;

At the signalling school at ALDERSHOT:—the same courses as with the field artillery;

At the Artillery College at WOOLWICH:—41 men to be trained as carpenters, and 41 as smiths. The duration of the course is undetermined;

10 officers, and 5 non-commissioned officers once a year for a six weeks' course in position finding;

10 officers once a year for a 3 months' course of instruction in electricity, steam engines, and hydraulics;

12 officers for  $6\frac{1}{2}$  months a year for training in the use of siege artillery.

### 5. Engineers.

With the exception of the drivers, every recruit enlisted for the "Royal Engineers" must know some trade. The drivers are trained at the depôt of the field-engineers at Aldershot, the sappers at the Chatham depôt, where the latter are trained for a year in infantry drill and pioneer duties. During the summer every depôt company in turn goes into a tent-camp at Wouldham near Chatham, where the recruits are taught camp duties, pontooning &c. The men, that are enlisted as telegraphists, photographers, printers, lithographers, or chartographers, have to go through an abbreviated course of pioneering; those selected for the companies of submarine mining are transferred to the mining school after having passed through their courses of infantry drill. The engineer recruits, are allowed 100 rounds of ammunition each for their course of target practice and fire practices 1, 2, 3, 7, 8, 10, 12, 14, 17, 19, 21, 23, and 26 of the infantry recruits' course, the remainder of the ammunition being disposed of as may be found best by the instructor.

When the course at the depôt is finished, the sappers must pass an examination, and are then transferred to the different engineer formations, where they receive higher pay, and may earn extra allowances by working at their special trades.

Every company must pass through a yearly recapitulation course in pioneer duties lasting 30 days, but the companies for railway duties only go through a 15 days' course in field pioneering duties proper. The men of the companies engaged in survey pass once every two years through a course in field-pioneering duties. Every sapper, armed with a rifle, practises every year Nos. 1 to 6, 10 and 12 of the target-practice of the infantry, and a sapper, armed with a carbine, Nos. 1, 2, 3, and 10. 80 rounds are allowed for each of the former men, 50 each for the latter.

The companies, &c. of the Royal Engineers are inspected yearly in the month of July by the Commander of the district, and also some time in summer by the Inspector-General of Fortifications in the technical engineer duties. The reports of these inspections are sent in to the Adjutant-General.

#### 6. ARMY SERVICE-CORPS.

The recruits of the Army Service-Corps are practised for 3 months at the Woolwich and Aldershot depôts in drilling on foot, target practices (as with the engineers armed with carbines), driving, and stable-duty, and afterwards are enrolled in the companies of the army service-corps.

The companies as such do not pass through a yearly course of training, as the men in garrison are incessantly engaged in special service; such courses are held, however, for artisans, as bakers, butchers, farriers, &c.; these courses are especially designed to meet the requirements of a mobilisation, and men are detached for that purpose. Every soldier belonging to the army service-corps goes yearly through the target-practices of the infantry course Nos. 1, 3, and 10.

#### b. Militia of all Arms.

The recruits of the infantry, garrison artillery, and medical corps of the militia, are drilled 63 days, and must practise 27 days with their battalion. Those of the fortress engineer battalion drill 56 days as recruits, and 41 days with their battalion, and those of the submarine mining sections 77 days as recruits, and 55 days with their sections. According to the letter of the law the recruits of the militia are to be under training for six months, but the above periods are considered sufficient, and are all that is enforced. It is left to the option of the recruit to undergo his drill practice immediately after enlistment, or at some later period; special regulations exist for concessions beyond these limits, and also with respect to obstacles caused by the season, but these need not be enumerated here. The recruits of the infantry, garrison artillery, and medical corps are trained together with the recruits of the regulars at the depôts of their territorial regiments, or garrison artillery, or at the depôt of the medical corps. This training is given by the officers of cadres of the militia, and by the personnel at the depôts. If during any one month there are more than 40 militia recruits at a depôt, the services of a militia officer may be requisitioned. In many cases, depending on local circumstances it is advisable to call in all the recruits simultaneously for a PRELIMINARY DRILL of 63 days' duration, and in connection with that, the battalion is afterwards assembled. For the preliminary drills, officers and non-commissioned officers of militia may be summoned in numbers depending on the number of recruits, and also trained militia men for sentry duty, and to act as cooks, officers' servants, &c.

The education of the recruits is divided into two parts. The first part consists of individual training, viz:—drill in single and double rank, manual exercise, training as rifle-men, and for arms of technical skill in special training as gunners, sappers, &c. The second part lasts a fortnight, and is devoted to target practice. Every recruit of the infantry or of engineers has 6 days' preliminary practice in firing with blank cartridges, and is allowed 85 (80 for engineers) rounds of ball cartridge. He must fire practices 1, 2, 3, 8, 11, 12, 13, 21, 22, 23, and 24 of the infantry recruits' course. The recruits of artillery are taught the theory of gunnery, and practise with blank cartridges.

The battalions are liable to be summoned every year for a 56 days' drill, but as a matter of fact the duration of drill is at present only 27 days for the battalions of the infantry and artillery and for the medical corps, 34 days for those battalions of artillery which are not drilled at their head quarters (see below), 41 days for the battalions of engineers, and 55 days for the submarine mining sections. All the non-commissioned officers of the artillery from the gunner upwards, the sergeants and corporals of the engineers and of the medical corps, as well as the sergeants and one third of the corporals of the infantry, may be called in for a four weeks' voluntary preliminary practice. Every soldier is informed by post, and by placards attached to public buildings of the time appointed for the battalions to assemble. The place of assembly is the head quarters, where the men receive their uniforms. Drilling is carried on mostly in the large camps at Aldershot, Shorncliffe, at the Curragh in tentcamps specially adapted for this purpose, or in large garrisons, where barrack-room is available. One third of the artillery battalions yearly drill in those fortresses, to the garrisons of which they will be added in case of war. The men belonging to the militia reserve (see Section I, Chapter I) drill with their battalion. During the time of drill the militia-men are under military law, and are treated like the regulars.

The battalions of infantry begin with a short recapitulatory course of individual training, to be followed by company- and battalion drill, and field service. Every soldier is allowed 50 rounds of ball cartridge to be fired in practices 1, 2, 3, 7, 9, and 10 of the infantry course. In every battalion one sergeant and ten privates belonging to the militia reserve are trained as ambulance men, and in mobilisation these men are attached to the medical section.

The following is the time table recommended for the drill of a battalion of artillery lasting 20 days of 5 hours each:—In the morning I hour's drill on foot = 20 hours; at noon 2 hours in gun-drill, manipulation of ammunition, theory of gunnery, &c. = 40 hours; in the afternoon 2 hours' target practice, repository work, &c. = 40 hours. The allotted quantity of ammunition is 90 cartridges, and 45 projectiles for each company. Special care is to be bestowed on the training of the gun-layers, being 4 to each company, and special distinctions and extra pay is awarded them.

The battalion of engineers are first trained as foot-soldiers, and go through the same target-practice. The period of training in engineering duties lasts 16 days; in the first eight days the men are taught the use of intrenching tools, the construction of rifle-pits, artillery-cover, barricades and intrenchments, the construction of casemates, knotting and splicing of cables, and bridging with barrels. In the second period of 8 days a selection is made from the following subjects:—defence of buildings, pontooning, placing gangs of labourers in siege-works, construction of batteries and magazines, roadmaking, building of blockhouses, camp duties, demolitions, escalading, sappers'- and miners' service, rowing, and the use of anchors. The education of engineers is partly imparted with the use of models, and lectures are also delivered occasionally.

In the submarine mining sections 32 days are devoted to teaching the handling and laying of the submarine mines, and to rowing and managing boats.

The men of the medical corps must drill daily for one hour as foot-soldiers or stretcher-bearers, and for the rest of the day they are trained in the practical duties of a military hospital. In addition to that, lectures are given on medical duties, and on the first aid to be given to the wounded.

Of late the battalions of militia infantry have been frequently assembled for brigade-drill, and in the manœuvres of 1896 and 1898

numerous battalions attended, and were placed in divisions or brigades along with regular troops.

A day or two before the conclusion of the drills every battalion of militia infantry or artillery is inspected by the Commander the territorial district or of the district of the garrison artillery, and the engineers by the chief engineer-officer of the district. The reports of these inspections are sent in to the General Commanding the district. After the termination of the drills the battalions return to their head-quarters, where the men give up their uniforms and accoutrements, and are dismissed.

# c. Yeomanry Cavalry.

No recruit is admitted into the yeomanry cavalry unless he is a good horseman, and can provide himself either with a horse of his own or with that of a relative. According to law the recruit must take part in twelve drills on twelve different days, but as a matter of fact the men take part in 20 to 30 drills. The recruits are allowed 60 rounds of ball ammunition each and fire the practices No. 2, 3, 8, 10, and 12 of the recruits' course. The training is provided by the Commanders of squadrons, and is given by sergeants of the permanent cadres.

Trained yeomen are required to drill on different days six times a year in the troop, and five times in the squadron before taking part in the annual regimental drills; the regiment is assembled every year for 14 days at most, but not for less than 8 days. The service of the yeomanry cavalry is principally that of light cavalry; stress is therefore laid on reconnoitering, patrolling, making reports, outpost service &c. The yeomen, who possibly constitute the best powers of the British middle classes, are specially fitted for this kind of duties; they are excellent cross country riders, and half of their officers consist of retired cavalry officers, landed proprietors, and enthusiastic foxhunters. Every yeoman is allowed 60 rounds of ball ammunition and must fire practices Nos. 1, 2, 3, 10, and 12 of the musketry course. The regimental drills are held at the head quarters of the regiment, or as may be ordered. The regiments of the yeomanry are inspected by the Commander of the district, or by a specially appointed Colonel of a regiment of cavalry; from time to time the regiments are also inspected by the Inspector-General of cavalry.

Every newly appointed officer of yeomanry is ordered to join a regiment of regular cavalry for a month, some time between the 16th of March, and the 31st of May, with the object of passing the spring course in a squadron. At the end of the month the officer is examined by the Commander of the regiment, and has a certificate of competency awarded to him. Yeomanry captains and field-officers may be ordered to join a regular regiment for a two-months' course, and it is open to every officer to present himself for the examination of the officers of regulars in tactics, military law, military sketching, and field-fortifications. Non-commissioned officers of the permanent cadres are frequently ordered to join recapitulatory courses with some regiment of cavalry.

Every year a yeomanry sergeant of every squadron of yeomanry may be ordered to join a regiment of cavalry or the yeomanry school for a period of one month.

### d. Volunteers.

To be considered an "Efficient Volunteer", and to earn the government grant for his company, every volunteer, officers included, must be present at the yearly inspection, and have attended the following drills (inclusive of the inspection of at least one hour's duration each) (see table p. 191).

Moreover every recruit of infantry or of engineers must, to be considered "efficient", pass through a course of target-shooting, consisting of 6 practices, firing at each 7 ball cartridges at distances of 100 to 500 yards, and in addition every volunteer (recruits included) must make 9 yearly practices of 7 ball cartridges each, at distances of 200 to 800 yards. For every volunteer, government issues every year 75 ball cartridges, and 60 blank cartridges. According to his performance in firing a volunteer may earn a higher government grant for the benefit of his corps.

Gunners must take part in the target-practices of their company. The ammunition issued for these practices for every company of garrison artillery, working with 40 pounder breech-loaders, is 55 rounds, and for 64 pounder muzzle-loaders, 36 rounds; for companies, using both kinds of guns, 25 rounds for the former, and 20 rounds for the latter. For every battery of position the allowance is 150 rounds.

The submarine mining sections occupy a very peculiar position among the volunteers; from the above tabular statement it appears that they have far more onerous duties to discharge than the men

		ACCOUNTS OF THE PARTY OF THE PA		
Arm	In the 1st year of service	In the 2nd year of service	In the 3rd and 4th years of service	In the 5th and following years of service
Cavalry	19 in the troop or squadron	19 in the troop or squadron	9 in the squadron, 3 in the regiment	4 in the squadron, 3 in the regiment.
Artillery (gunners)	21 at the gun, 9 drills on foot	21 at the gun, 9 drills on foot	9 at the gun, 3 drills on foot	9 at the gun.
Artillery (drivers)	20 riding or driving, 10 drills on foot	12 riding or driving, 18 at unhorsed guns	12 in the battery	12 in the battery.
Engineers	12 engineer duty, 24 drills on foot	<ul><li>12 engineer duty,</li><li>24 drills on foot</li></ul>	6 engineer duty, 9 drills on foot	5 engineer duty, 7 drill.
Submarine }	78 mining duty, 8 permanent service	78 mining duty, 8 permanent service	48 mining duty, 8 permanent service	60 hours in all.
Engineers of the Reserve of Railway troops	12 engineer duty, 24 drills on foot	Every ye	Every year 12 engineer duty, 9 drills on foot.	lls on foot.
Infantry	30 drills	30 drills	9 in the company, 3 in the battalion	4 in the company, 3 in the battalion.
Medical Corps	16 as stretcher bearer, 20 drills on foot	16 as stretcher bearer, 20 drills on foot	Every year, 8 as stretche	Every year, 8 as stretcher bearer, 9 drills on foot.

of the other arms. Every year camps of instruction are arranged for them to last a fortnight, and the men must remain there at least 8 days each; these camps are usually in the neighbourhood of the field of mines which they would have to defend. In addition they have to go through drills in mining duty either at their free time or during a stay protracted beyond their eight days' service. The grants allowed to the submarine mining sections are considerably higher (see Section III, Ch. V) than those for the other arms; and the men too are mostly paid, which is not the case with the other arms.

Individual training and company drill of the volunteers naturally are given in their own locality, mostly of an evening, or on Saturday afternoon. But as many battalions lie scattered far asunder in the country districts, most of the troops are assembled once a year for a week in a tent-camp for battalion drill and target practice. These meetings are generally held in autumn. In addition all the battalions of an infantry brigade are combined every three years in a single camp. Such brigade-camps are mostly pitched on the large drill grounds belonging to the army, these being the only places affording the room necessary for the drills.

The officers who inspect the militia, inspect the volunteers also, and their reports are submitted by the Commander of the district to the Adjutant-General.

For the more advanced education of volunteer-officers, special schools have been established; viz:-for artillery at Woolwich, for pioneers at Chatham, for submarine mining sections at Portsmouth and Plymouth, for infantry at London and Aldershot, and for the medical corps at Aldershot. Lieutenants of infantry are admitted to these at their own request, for a month; of artillery and pioneers for two months; of the submarine mining sections for four months, and of the medical staff corps for six weeks. Instead of one month at school lieutenants of combatants may be ordered to join a battalion &c. of their own arm. Captains and Field-Officers are also allowed to attend these schools, and the time of their stay there is about the same as that of the lieutenants. Special courses are naturally arranged for them. The subjects of instruction vary according to the arm, but they mostly refer to formal drill, as well as fieldservice both for artillery and engineers. Volunteer-officers of cavalry are ordered to join regiments of regulars like those of the yeomanry.

A limited number of volunteer-officers is admitted to the school of musketry at Hythe, and they may present themselves for the same examination in tactics, field fortifications, topography, military law, and (artillery officers) in the theory of artillery, as the officers of the regulars have to pass. There are also signalling schools for volunteer-officers established every year.

Attendance at these schools, and passing the examinations earns for the companies the extra grants mentioned in Section III, Ch. V.

### e. Drills of large Assemblies of Troops.

As has already been mentioned above, the troops are not allowed in the United Kingdom to use grounds for their drills without the consent of the proprietors, or unless certain districts have been declared available for manœuvres, under the Military Manœuvres Act of 1898. Under this act any land required by the military authorities for manœuvres can be declared available by an Order in Council, six months' notice being sent to the various local councils before the order can come into force. Compensation is paid for all damage done, and the troops may move freely over all private property with the exception of parks, gardens, towns and villages, and such like.

The first manœuvres carried out under this act took place in 1898, and over 50,000 men in two army-corps with two cavalry brigades were engaged in them. These manœuvres will doubtless be repeated every two or three years, smaller manœuvres on the Government training grounds or on hired lands being substituted in the intermediate years.

During the manœuvres the troops are accommodated exclusively under canvas, there being no law in Great Britain for billetting the men in times of peace. On the march, troops may be billetted at inns and public houses, but these quarters do not meet the requirements for manœuvres.

### THIRD SECTION.

I. Appointment and promotion of Officers, Warrant-Officers, and Non-commissioned Officers.

### a. Officers.

THE different ranks of Officers are:-

Field Marshal

General

Lieutenant-General

Major-General

Colonel

Lieutenant-Colonel

Major

Captain

Lieutenant

Second Lieutenant

Quartermaster

Riding Master.

The two last categories of Officers hold honorary rank as lieutenants, captains, or majors, according to seniority.

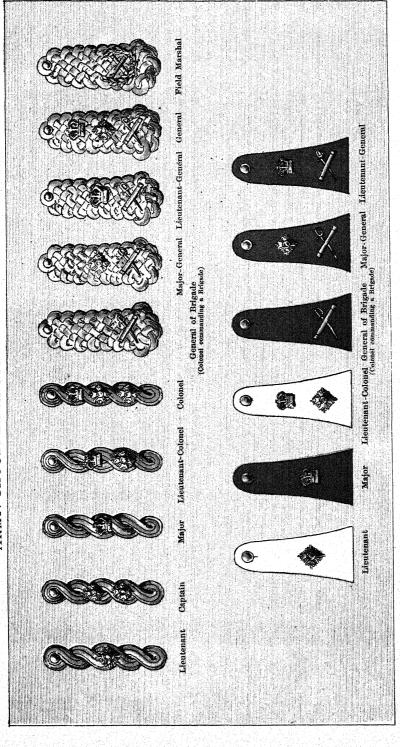
The medical officers have the same titles as the combatants, but their highest rank is that of major general, entitled Surgeon-General, and they have no 2nd lieutenant's rank.

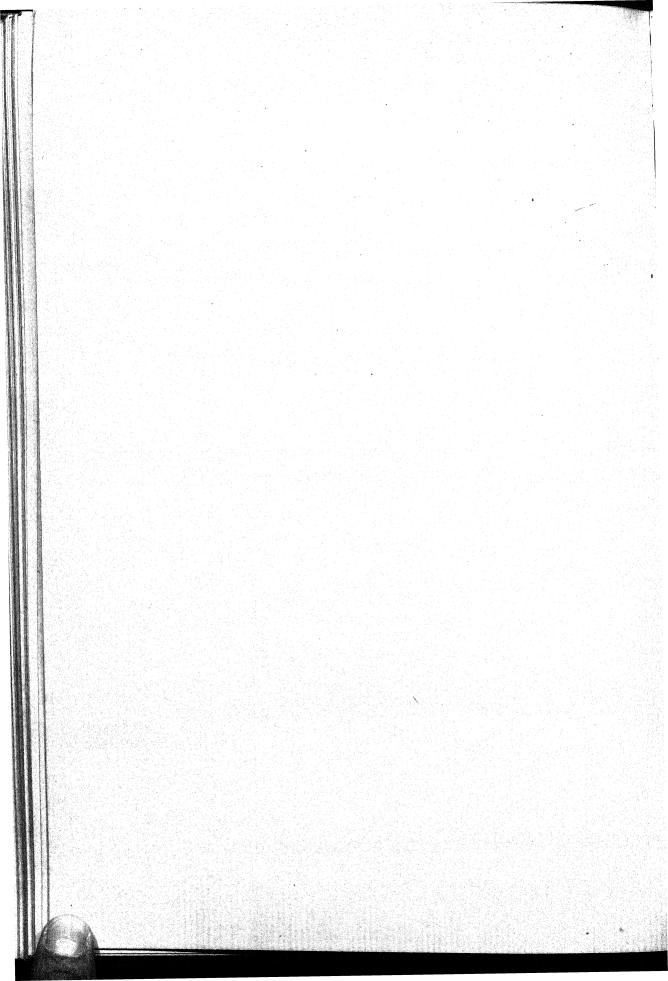
The veterinary officers have the word "veterinary" prefixed to their rank, and rank from the Veterinary-Colonel down to the Veterinary-Lieutenant.

Appointments to the rank of Second Lieutenant are conferred on the following:—

a) Cadets from the "Royal Military College" (see Ch. IV). (These supply about two thirds of the recruits for officers of both arms).

# ARMY: SHOULDER KNOTS AND BADGES OF RANK





- b) Subaltern officers of militia, who have undergone two yearly drills, and have held officer's rank for at least 15 months; they must be under 24 years of age, have passed a competitive examination in scientific, and military branches (similar in severity to the leaving examination of the "Royal Military College"). The number of Second-Lieutenants thus appointed amount to from 120 to 50 a year.
- c) Cadets to a very limited number (2 a year) from the "Royal Military College, Kingston, Canada."
- d) University students, from 17 to 22 years of age, who have passed a competitive examination. The limit of age for University-Graduates is 23 years. Having passed this examination the candidate, if he is not already an officer of militia or volunteers, is attached to a corps of this arm, till he has passed in military branches an examination similar to that passed by militia officers. The number of candidates of this class is very limited, and is fixed year by year.
- e) Officers of colonial militia or volunteers under certain conditions, and in very limited number.
- f) Warrant-Officers, and sergeants. They are proposed for promotion by their officers, must at least be corporals, not be more than 24 years of age, and have served two years. At the time of their appointment they must be sergeants at least, and possess a first class certificate of education; they must not be more than 26 years of age, must never have been punished, and not be married. The number of Second-Lieutenants of this class amounts to from 12 to 20 a year.

As Second-Lieutenants in the artillery and engineers are appointed:—

- a) Cadets of the "Royal Military Academy" (see Ch. IV). These constitute the large majority of recruits for the officers of both arms.
- b) Subaltern Officers of the militia artillery may be appointed on the above terms to the rank of Second-Lieutenant in the regular artillery. Their number is very limited amounting to from 4 to 12 a year.
- c) One cadet a year for each arm from the "Royal military College, Kingston, Canada."

Warrant Officers and non-commissioned officers are never promoted to the rank of Second Lieutenant in these two arms. But there exist special categories of officers, who are appointed to Lieutenancies at once, and are designated in the artillery as "District Officers", and in the engineers as "Officers of the Coast-battalions." They are

recruited solely from the warrant-officers, and non-commissioned officers of both arms, who are less than 40 years of age; a special category of artillery mechanicians is recruited solely by open competitive examinations. Up to the rank of Major these officers are promoted according to their own lists of seniority, and they are employed in the coast-fortifications, and harbour-defences, or as Adjutants of volunteers.

As Second Lieutenants in the Army Service-Corps may be appointed:—Second Lieutenants of the army, and of the marines with at least one year's service as officer, also cadets of the "Royal Military College", militia officers, warrant officers, and non-commissioned officers.

The Quartermasters and Riding Masters of the army are recruited exclusively from the warrant officers, and non-commissioned officers, and must at their appointment not be more than 40 years old. These appointments, and the above named officers' posts in the artillery, and in the engineers offer a good career for trustworthy non-commissioned officers.

The medical officers, and veterinary surgeons are recruited from qualified students of the technical colleges, who have passed a competitive examination.

The officers of the pay and ordnance departments are recruited from officers of the regular army, who have been transferred to these branches. The former must render security, and the latter must have served at least four years, and have passed special courses.

The promotion of officers up to the rank of Lieutenant-Colonel takes place in the regiment itself according to the vacancies that arise in the establishment. An officer is rarely transferred to another regiment, and usually then only, if the senior officer of a certain rank is too junior for promotion to the next higher rank, or if special circumstances make it desirable that a certain officer be appointed to the rank of Commander of Second-in-command of a battalion. A voluntary exchange of posts between officers of equal rank in different regiments is conceded on certain terms; but officers who exchange in this way are placed at the time of exchange at the bottom of the regimental lists of their rank. Officers of the General-Staff or in special posts, up to the rank of Major, are seconded in their regiments; on being discharged from these posts they return to their former regiments without loss of seniority. Lieutenant-Colonels,

who are not regimentally employed, are borne on a separate list, and are not seconded in their regiments.

Officers can be promoted to the rank of lieutenant, captain or major, if they are declared fit and deserving by their commanding officer, and pass a written and practical examination. These examinations comprise:—

- a) Regimental duties, Interior Economy, Discipline, Administration, Packing, and fitting of accourrements for men and horses, and Service in camp:
- b) Acquaintance with the drill regulations (theoretical and practical on the drill-ground, and in the open country);
  - c) Military Law and jurisdiction;
  - d) Field-fortification, surveying, and tactics;
- e) Construction of artillery and appliances of ditto, theory of firing, organisation of field- and fortress artillery, &c.;
  - f) Organisation and service of the Army Service-Corps;
- g) Organisation, and equipment of his own arm in peace and in war. Second Lieutenants must pass an examination in a and b before being promoted to the rank of lieutenant, and also warrant officers and non-commissioned officers before being promoted to the rank of officer. On the passing of this examination depend the allowances to be drawn by the Second Lieutenants of the garrison-artillery, and of the engineers. Second lieutenants of artillery, engineers, and the army service-corps are promoted to the rank of lieutenant after three years' service as Second Lieutenants. During this time the former are employed according to their capacity either with the field- or with the garrison artillery; promotion to the rank of lieutenant finally determines the arm to which they belong, and all further promotion is conferred in the same arm.

Lieutenants of cavalry and infantry must pass in the subjects enumerated under c, d, and g, ere they can be made captains; lieutenants of artillery and of the army service-corps must pass in the same subjects, and the former the subjects under e, and the latter those under f in addition.

Captains must have served six years ere they can be promoted to the rank of major, and they must moreover pass in the subjects under a, b, c, d, and g, and those of the army service-corps those under f as well. The examinations of the officers of this class enter more into details than those of lieutenants, especially in the subjects under c. Officers who have attended the Staff College are only required to pass in the practical part of the subjects under b, and further dispensations are conceded to those officers who have gone through certain courses or schools. Captains must have served two years in their rank ere they are allowed to present themselves for examination. To pass, a candidate must gain at least  $50^{\circ}/_{\circ}$  of the marks attainable.

A major, before his promotion to the rank of lieutenant-colonel must pass a practical examination conducted by a committee consisting of a major-general, and two lieutenant-colonels. In addition to mapreading, and marking the position of troops on the map, he must solve in writing a problem of tactics set him, and at his option command at a manœuvre a battalion, or a regiment of cavalry, or a battery, and subsequently a detachment of all three arms combined.

The post of commander of a battalion, or of a regiment of cavalry, is retained only for four years, but exceptionally the period may be extended for two more years. After this time the officer is put on half-pay, and has to wait for further employment in another post. The same rule applies after five years to lieutenant-colonels of artillery, and of engineers.

If among the engineers, and in the army service corps no position on the establishment is vacant, lieutenants may be promoted to the next rank after eleven years of service, and with the engineers captains also after twenty years of service.

A special kind of promotion is the so called promotion by "Brevet." Officers, from the captain upwards, who have distinguished themselves in the field may be promoted to the next higher rank in the army, and still retain their own rank in their regiment. If they are serving with their regiments, their position on the regimental list decides their seniority, but if it is a question of commanding a detachment of two or more units drawn from different regiments then the Brevet-rank is decisive. A lieutenant-colonel may be made a Brevet-colonel, if he has been appointed Aide-de-camp to the Queen, or has been for four years in command of a battalion, a regiment of cavalry, or has held a similar command in the artillery or in the engineers.

Brevet-colonels or lieutenant-colonels are promoted to the rank of colonel without examination, if they have served for three years in their rank, or have been employed as commanders of a regiment, or a district, or in certain posts of the General-Staff &c.

With the exception of the Indian army and of the marines, there are on the establishment of active officers:—10 Generals, 20 Lieute-

nant-Generals, and 70 Major-Generals. Colonels are promoted to the rank of Major-General only if actual vacancies occur in the establishment. Promotion to the rank of Major-General is conferred two thirds by selection, and one third by seniority, and to higher ranks by seniority.

Promotion to the rank of Field Marshal depends on the choice of the Sovereign, and is independent of seniority or length of service. Exclusive of the Indian army there are on the establishment six Field Marshals.

The General Staff is recruited from officers who have successfully passed through the Staff College or have proved in the field their capacity as officers of the General Staff, which does not form a separate body. The officers appointed to it remain seconded in their own regiments, and are attached to the General Staff only for a number of years (generally five). After this time they may continue to be employed exceptionally in the General Staff, but as a rule they return to their regiments without loss of seniority, remaining there two years, ere they are again employed in the General Staff.

The Reserve Officers of the army form two categories, viz:-

- a) Officers of the regular army who have retired with a pension: lieutenants and captains up to the age of 50, Field-officers to the age of 55, and Generals to the age of 67.
- b) Officers of the regular army or of the militia, who have retired without pension, and have at their own request been placed in the reserve. The former can be appointed lieutenants up to the age of 40, captains up to the age of 45, and Field-officers up to the age of 50.
- c) Officers still serving in the yeomanry or with the volunteers, who at their own request, and under certain conditions have been appointed officers of the reserve.
  - d) Discharged officers of the Indian army at their own desire.

To be appointed captain of the reserve a militia officer must have attended seven annual drills, at three of which he must have held the rank of captain; a yeomanry or volunteer officer also seven years with three years as captain; he must also pass the examination for field officers, and have served six weeks with a body of regulars. To be made lieutenant of the reserve a militia officer must have made two yearly drills, and have passed the lieutenant's examination; a yeomanry or volunteer-officier must have served two years as officer, and have successfully attended some school of instruction. Such

volunteer- or yeomanry officers may be appointed lieutenants up to 30 years of age, and captains of horse or foot up to 35 years of age. Officers of the reserve who have not served in the regular army may be called in every year for one month's training.

The reserve of the medical corps is recruited from the surgeons of the militia, the yeomanry, and the volunteers, who apply of their own accord. They can in peace-time be called on to serve with the troops in their garrisons.

In war all the officers of the reserve are at the disposal of the service with every arm or detachment, and in every quarter of the globe. On duty they are entitled to the same pay and allowances as the officers of the regular army.

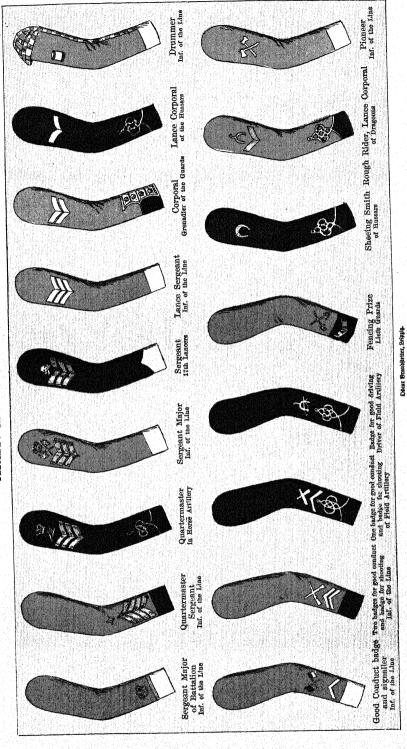
Officers of militia, yeomanry, and volunteers are appointed by nomination by the Lord-Lieutenant of the county; these gentlemen must be at least 17 years old, and hold a good social position. They begin as second lieutenant, and are promoted in their regiment as vacancies arise. Up to the rank of major every promotion depends on passing a written, and practical examination either before or within the prescribed period. Officers, who have previously served in the regular army, can be appointed officers with their former, or even a higher rank in the same arm, and are excused the promotion-examinations. The highest rank is that of lieutenant-colonel, and only exceptionally a volunteer-officer is appointed full colonel, or commander of a brigade of volunteers. After a certain number of years of service officers of these arms may have a higher rank conferred on them as an Honorary-rank.

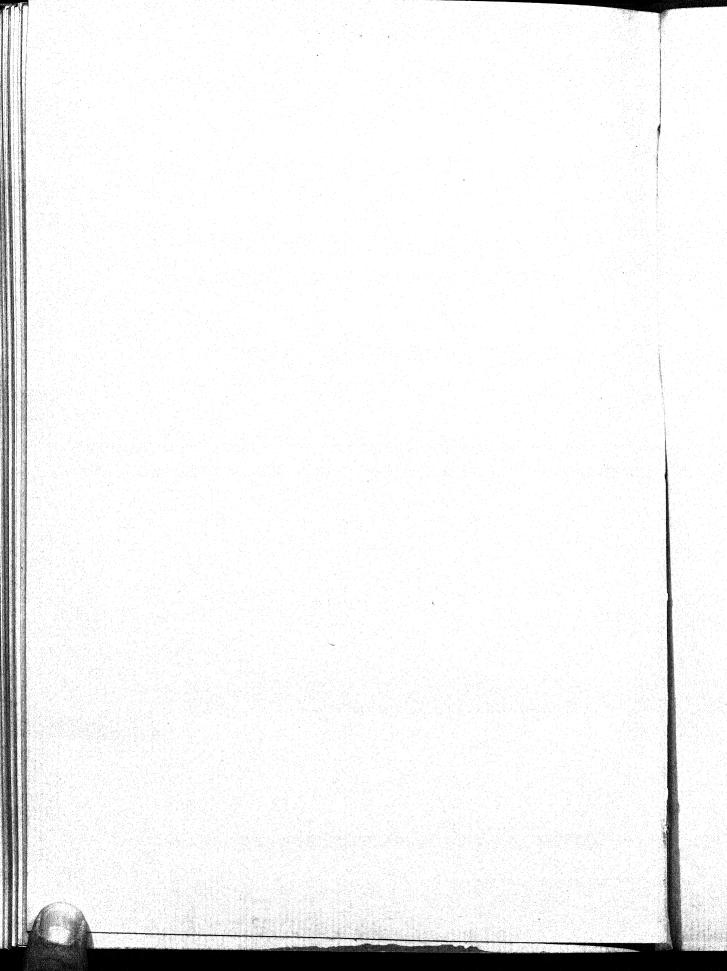
### b. Warrant Officers.

Warrant Officers hold a position intermediate between commissioned and non-commissioned officers; they are appointed by Warrant of the Secretary of State for War. The principal classes of warrant officers, who take rank in their own corps according to seniority of appointment, are as follows:—

Conductors of ordnance, staff-sergeants 1st class; master-gunner 1st or 2nd class, garrison sergeant major, sergeant major of infantry or cavalry, band-master, military schoolmasters after eight years' service as such, sergeant-major artificer of artillery, armourer sergeant-major, sergeant-majors employed in the military training schools and artillery technical institutes, chief clerks, &c.

# ARMY: MEN'S SLEEVE BADGES





To be appointed warrant officer the man must at least be a sergeant, and not more than 40 years of age, and candidates for appointment as conductors of ordnance must not be more than 35 years of age.

There are no promotions for warrant officers; but they may be promoted to honorary rank as officers (usually as Quartermasters, or Riding masters).

### c. Non-commissioned Officers.

The non-commissioned officers consist of two categories, viz:—the "non-commissioned officers" from the sergeant upwards, and the "Rank and file non-commissioned officers, from the corporal downwards. The non-commissioned officers are subdivided into ten classes, and within each class the non-commissioned officers belonging to it rank according to seniority. The classification is as follows, but it must be noticed that under 5 and 7 the very numerous grades of non-commissioned officers employed in technical and other institutions are not mentioned, viz:—

- I. Sergeant Major of Militia
- 2. Master Gunner 3d class
- 3. Military Schoolmaster

5.

- 4. Garrison Quartermaster Sergeant
  - Quartermaster-Sergeant artificer of various trades (farrier, saddler, &c.)
  - Quartermaster Sergeant of a battalion or regiment of cavalry. (These non-commissioned officers take rank above all the others in their corps.)
  - Paymaster Sergeant or Clerk with rank of Quartermaster Sergeant,
  - Sergeant major of a company of the army service-corps,
  - Colour Sergeant of infantry, Squadron-Sergeant-Major, Battery Sergeant-Major, Company Sergeant-Major, Company Sergeant-Major of the other arms. This officer is always the senior non-commissioned officer in a squadron, &c.
- 6. Squadron-, Battery- or Company Quartermaster-Sergeant,
  Paymaster sergeant or Clerk (with rank of Colour Sergeant),
  Squadron Sergeant-Major-Roughrider
  Staff Sergeant Farrier
  Staff Sergeant.

Sergeant

Orderly Room Sergeant

Paymaster-Sergeant

7. Pioneer Sergeant

Sergeant artificer of different trades (farrier, saddler, &c.)

Sergeant-Drummer, -Piper, -Bugler

| Sergeant-Trumpeter

8. Lance-Sergeant.

Corporal

Corporal artificer of different trades

Bombardier, only in the artillery

9. Second Corporal only in the corps of engineers, and in the army service-corps

(Note: Bombardier and Second Corporals take rank after all other corporals in their regiment or corps).

IO. Acting Bombardier Lance Corporal.

With the cavalry of the guards sergeant majors are designated as Corporal-Majors, and sergeants as Corporals of Horse.

The common soldier is called Private right through the whole army, except in the artillery and engineers, where the privates are classified into Gunners, or resp. Sappers, and Drivers.

The non-commissioned officers are appointed by the commanders of the battalion, &c., and promoted in the regiment by seniority. Promotion to the rank of a non-commissioned officer of the 9th class, or to the rank of sergeant artificer (7th class) requires the production of a certificate of school-education (see Ch. IV) of the 3rd class, and for higher promotion a similar certificate of the 2d class. Promotion to the rank of a non-commissioned officer of 2d, 3rd, and 4th class, and to some posts in the 5th requires a school certificate of the 1st class.

The non-commissioned officers of the 8th and 10th classes belong strictly speaking to the class just below them, those of the 8th class being practically corporals, and those of the 10th privates. They are appointed by the commander of the battalion to temporarily discharge the duties of non-commissioned officers that have been detached or employed in certain posts, and they may be reduced to their former rank upon the order of the commander of the battalion, whilst other non-commissioned officers can be degraded only by sentence of a court-martial.

The number of these acting non-commissioned officers is fixed by regulation, viz:—With a regiment of cavalry:—4 lance-sergeants in a regiment, 6 lance-corporals in the squadron; in a field battery:—9 acting bombardiers; in a company of garrison-artillery:—8 to 10 acting bombardiers; in a company of field-pioneers 8 to 12 lance-corporals; in a battalion of infantry of the line:—4 lance-sergeants per battalion, and 4 lance-corporals per company.

These non-commissioned officers are not borne on the peace- nor on the war-establishment.

Ere a soldier can be appointed corporal or bombardier, or be promoted from these ranks to the rank of sergeant he must pass an examination in the service of his arm in the barracks, on sentinel duty, in camp, and on the march; also in acquaintance with the drill regulations and the theory of musketry, and in fitting on and packing of accourrements. This examination is conducted by a committee consisting of the officer, second in command of the corps, the adjutant, and the commander of a company or a squadron. This examination consists of two parts:—an oral theoretical, and a practical part. It is the duty of the commander of a company to prepare his men for these examinations.

# II. Duties of officers and non-commissioned officers with the troops and in garrison.

### a. Officers.

The commander of a battalion of infantry, or of a regiment of cavalry, or of a Brigade division of field-artillery is a Lieutenant Colonel, who is responsible for the training, discipline, and management of the troops entrusted to him. He controls the different funds and moneys, which are paid out on account of his corps, and he is specially responsible for the proper management of the officers' mess. He must see that the officers are animated by a proper spirit, and he directs their military studies and education. He sends in confidential yearly reports about all the officers under him. He is also responsible for the clothing, arms, and equipment, for all the military appliances in charge of his corps, and for the receipt and issue of all victuals, inclusive of forage for the horses.

In every battalion or regiment of cavalry, one of the majors, usually the senior officer, is appointed Second in Command. This officer has no fixed responsibility, but he is the Chief assistant of the commander of the battalion, &c., and he supports him in every possible way. He is usually charged with the superintendence of the education of the younger officers, and watches over the management of the canteens and of the messes of the officers and sergeants. He is not in command of any company or squadron.

Companies or Squadrons are commanded by the other majors or captains in the infantry, and senior captains in the cavalry. A battery is always commanded by a major. The officer in charge of a company is responsible to the commander of his battalion for the training, discipline, management, clothing, equipment, &c. of his company. He superintends the victualling and interior economy of his men, the stable duties of mounted branches, and the receipt and expenditure of all the moneys assigned to his company. In the artillery the captain of a battery is the assistant of the commander of the battery; he is not in command of any section, and discharges towards his Chief the same functions as does the Second in Command of a battalion.

A company is divided into two half-companies, a squadron into 3 or 4 troops (according to the establishment of the regiment), and a battery into 2 or 3 sections (according to the number of horsed guns); these are commanded and managed by lieutenants (in the cavalry also by junior captains). Men and horses are very rarely transferred from one section to another, whereby the responsibility of the young officers for the units in their charge is made as real and serious as possible.

The Adjutant of a battalion (regiment or other unit) is appointed by gazette, and may be either a captain or a lieutenant. He retains this post for five years. He superintends the training of the infantry and cavalry recruits in musketry, and he has under him the band of the battalion, the trumpeters, buglers, drummers, &c.

With the infantry and the cavalry a lieutenant is appointed as Assistant-Adjutant; this appointment is made by the commander of the battalion or regiment. The Assistant-Adjutant is to render help to the Adjutant in the discharge of his duties, especially in training the recruits in musketry; he instructs and commands the machinegun section, which may happen to be attached to the battalion or regiment.

The Quartermaster assists the commander in all matters concerning the clothing, victualling, and quarters of the men. He is in charge of the clothing stores, of the magazines for issuing provisions, and of all the unoccupied premises in the barracks. He is responsible for the number or the weight, but not for the quality, of the clothes and provisions received for the company or issued to them. To examine the quality of these articles on being received into store is the business of a committee, or of the officer on duty, and on being issued to the men, of the officer commanding the company. The Quartermaster is not concerned in money-matters. In the artillery, where the batteries are far more self-dependent than the companies or squadrons of other arms, the functions of the quartermaster are mostly discharged by the commander of the battery, consequently the quartermasters of the artillery are mostly concerned solely with the barrack-accommodation.

The Riding Master instructs officers and men in riding and in the use of the sword, and generally superintends the riding lessons given by the rough riders of the squadron or battery. The training of the recruits in riding is under his direct control.

With every battalion or regiment of cavalry or any separate detachment a lieutenant superintends the training of the signallers.

In garrison a field-officer (not the commander of a battalion) is appointed daily as Field-Officer of the day. In small garrisons this post may be filled by captains. The Field-Officer of the day must be present at the relief of the garrison guards, and visits them once by day and once during the night. In case of a fire or of a riot he takes command of the troops despatched to the scene. He visits the garrison hospital, the military schools, &c., and must not during the period of his service leave the limits of the garrison.

In every battalion, regiment of cavalry, or other unit a captain is appointed once a week, and a lieutenant once a day to superintend the interior service of their corps. Usually the captain visits twice a week the hospital, the school of the battalion, the guard room, and the prison; also the sergeants' mess, the horse hospital, the canteens, and the other institutions of his corps and makes sure that all is in order. He superintends the lieutenants on duty for the day, receives from them daily reports, and is restricted to the garrison like the field-officer on duty for the day.

The Lieutenant on duty must be present at the issue of the provisions and forage and inspect their quality. He is present at the

relief of the guards drawn from his corps, and visits the barrack sentries both by day and at night. He visits the dining rooms of the men at meal-time, inquires if there are any complaints, and visits the prisoners' cells, and makes reports on the presence or absence of the men and informs the captain of any special occurrence he happens to notice. With mounted arms he is present both morning and evening at the service in the stables, and superintends the management of the horses that are not employed. Whilst he is on duty he must not quit the barracks.

### b. Warrant Officers and Non-commissioned Officers.

The Sergeant-Major is a Warrant Officer and the head of the non-commissioned officers of his regiment or battalion. He is the Adjutant's assistant in all that concerns the interior service of the battalion; he keeps the rosters of the non-commissioned officers, and dictates the orders of the battalion to the men charged to receive the company-orders. He is present at the mounting of the guards, examines the equipment of the men on sentry duty, and reports to the lieutenant on duty for the day. The guard rooms and prisoners are under his special control, and he is responsible for the execution of all punishments ordered by the commander of the battalion.

The Bandmaster is also a Warrant Officer, and he has charge of the musical education of his band.

The Quartermaster Sergeant of the battalion or of the regiment is the Assistant of the quartermaster and the senior non-commissioned officer of his department. He directs his attention to the cleanliness of the barracks, yards, water-closets, kitchens, &c., and frequently visits the workshops. He manages the issue of the provisions in detail and keeps the accounts of the clothing, equipment, and provisions of the battalion. With the cavalry and with the artillery every squadron or battery has a quartermaster sergeant, who ranks after the sergeant major and discharges the corresponding duty in his branch.

The staff of the battalion or regiment comprises also (see Section I, Ch. II) the armourer sergeant, who attends to the repair of small arms, the orderly room sergeant who conducts all clerical matters in the office of the battalion, the paymaster-sergeant, who attends to the clerical work connected with money-matters, the sergeant saddler, sergeant master tailor, the farrier sergeant of the squadron, and the pioneer sergeant, who have charge of the different workshops; the sergeant cook, who superintends the kitchen, the sergeant instructor

in fencing, the drummer major of the battalion, and the band sergeant (assistant of the bandmaster).

The colour-sergeant or squadron sergeant-major is the senior non-commissioned officer of the company, squadron, or battery, and supports his captain in the same manner as the sergeant-major of the battalion supports his adjutant in the battalion. With the infantry or cavalry he also keeps the books of the company or squadron, but in the artillery this duty is discharged by another non-commissioned officer. He also keeps the drill journal of the company, superintends the inner service of it, as well as the execution of the punishments ordered by the captain, and keeps the rosters of the non-commissioned officers and men. Applications for furlough must be approved by him, before they are submitted to the commanders of companies, squadrons, &c. He is also responsible for making a correct copy of the daily orders and its publication, and with mounted troops he has always to be present at the discharge of the stable-duties.

The Sergeants are in command both within and outside the barracks of the sections of the company, and of half-troops and guns with the cavalry and artillery. They are responsible to the commanders of their half-company or troop for the armament, equipment, barrack utensils, &c. of the men, and also of the rooms inhabited by the men, and they have to render account of the interior economy of the men. In every company, squadron or section one sergeant is told off for a week's duty to assist the colour-sergeant in the discharge of his duty.

The Corporals, Bombardiers, and Lance-Corporals assist the sergeants in the discharge of their duties. The former are generally employed in charge of the barrack rooms. In contrast with the sergeants who have separate rooms and dine at the mess of the non-commissioned officers (see Ch. VIII), the corporals, &c. live and dine with their men, and are responsible for the order, quiet, and good behaviour of the men in the rooms. They are also employed as commanders of small fatigue-parties or other detachments, and in the discharge of lesser duties in the interior service of the company, &c.

With the mounted troops every squadron or battery has a sergeant farrier, and a number of farriers, a saddler, and a wheeler, who work either in special workshops, or all together under the sergeant major of the artificers of the regiment. Every battalion of infantry has 10 pioneers (3 carpenters, 2 masons, I farrier, I stone mason, I glazier

and 2 plumbers), who form a workshop of the battalion under the pioneer sergeant, and do all the repairs in the barracks.

The Rough Riders of different grades, that are detailed to the squadrons and batteries, superintend the training in riding and fencing, and are to some extent at the service of the riding master.

# III. Disciplinary Power.—Military Penal Law and Jurisdiction.

### a. Disciplinary Power.

The Disciplinary Power is entrusted to the commanders of battalions, regiments of cavalry or brigade divisions, who may delegate their power to the commanders of companies, squadrons, or batteries to impose penalties not exceeding 7 days' confinement in barracks, and money fines for small delinquencies such as drunkenness. If these latter are detached with their companies from the next higher unit, then they possess with some limitations the punitive authority of a commander of a battalion. Other officers are only authorised to punish irregularities during drill or on parade with imposing extra drills; non-commissioned officers have no power to inflict punishment, but every officer or non-commissioned officer may put his inferiors under arrest for any military misconduct, but is bound to report the matter forthwith to the immediate superior of the accused.

A commander of a battalion has no punitive power over officers. He can put them under arrest and immediately report the matter to the higher authorities. Non-commissioned officers he can only reprimand, to reduce them he must summon a regimental court-martial. Under exceptional circumstances lance sergeants, lance corporals, and acting bombardiers may be reduced from their temporary to their permanent rank, that is to say to corporals or privates.

On privates the commander is authorised to inflict the following punishments:—

a) Imprisonment with or without hard labour for a fortnight. A commander of a detached company, who is not a field officer, can only inflict an imprisonment of 7 days. In cases of absence with-

out leave imprisonment may be awarded of the same number of days as the absence, but not beyond 21 days.

- b) In cases of drunkenness money fines from 2/6 to 10/- in due gradation. If these fines are inflicted at all, then they are obligatory for every case of drunkenness. As a rule the first and second case, and a relapse after the expiration of 9 months, are let off without the exaction of a fine, but for a case within 3 months, sentence is given for a fine of 7s. 6d.
- c) In cases of absence without leave deduction of pay for the number of days of absence up to 5 days. In cases of absence for more than 5 days the loss of pay is inflicted in any case in conformity with the Royal Warrant.
- d) Deductions of pay to make good loss or damage caused by the man, of articles of equipment, clothing, arms, or other military necessaries.

In the cases of b, c, and d, which concern pay, the man has the right to refuse the acceptance of the penalty and to demand trial by a court-martial.

- e) Confinement to barracks up to 28 days. Men so punished must not leave the barracks, but take part in all fatigues. They join in drills, mounting guard, &c. as usual, and must in addition fall in at irregular times for punishment drill. If their regular duties are not sufficiently heavy, they must be fully employed by marching up and down in marching order for 2 hours a day with mounted troops, and for 4 hours a day with dismounted troops.
- f) Extra guards for irregularities in the discharge of sentry duties. The commanders of militia battalions have the same disciplinary powers as those of the regular army. With the yeomanry and the volunteers the commander can only inflict the penalty of expulsion.

### b. The Army Act.

The following are subject to the Army Act:-

- a) At all times:—Officers, warrant officers, non-commissioned officers and men of the regular army, inclusive of the permanent cadres of militia, yeomanry, and volunteers, as well as officers of militia.
- b) In certain cases:—men of the Army reserve or Militia, who are called out for drill or permanent service; officers and men of the Yeomanry, who are called out for drill or permanent service; officers and men of the Volunteers, who are called out for permanent service (e. g. in case of mobilisation), and are attached to the regulars or

to the militia, or drill in their own units with units of the regular army or militia. In these latter cases their commanders must remind them that they are subject to military law.

The Army Act only deals with military delinquencies. Soldiers accused of some civil crime are dealt with by the civil tribunals according to the usual laws of the country. Exceptionally, reservists may also be punished by a military court. High treason, murder, manslaughter and robbery are in the United Kingdom and in Gibraltar never punished by a military court. But if such crimes are committed in the field or at a distance of more than 100 miles from the nearest civil court, then a military tribunal can pronounce sentence also on those crimes.

The punishments which may be inflicted by military courts are:-

- a) On officers:—death, penal servitude for not less than 3 years, imprisonment with or without hard labour for 2 years, expulsion from the Queen's service with disgrace, reduction of rank, severe or simple reprimand.
- b) On warrant officers:—discharge, temporary reduction and loss of pay, loss of seniority, degradation, and other punishments to which non-commissioned officers and privates are liable. A warrant officier, who has been reduced to the ranks is to be forthwith discharged.
- c) For non-commissioned officers and privates:—death, penal servitude for not less than 3 years imprisonment with or without hard labour up to 2 years, discharge from the army with disgrace, degradation (for non-commissioned officers) to a lower grade or to the ranks, and money fines (for drunkenness or to make good lost articles of equipment, &c.).

There are known in the field two kinds of field-punishment in neither of which may imprisonment exceed three months. In field punishment No. I the culprit is put in chains and may be bound fast in a rigid position for 2 hours a day on three or four consecutive days. The extreme length of punishment in this case is 21 days; in other respects the culprit is treated like a common prisoner in times of peace.

The "Queens Regulations for the Army" prescribe that, for first cases in the following offences, the penalty should in times of peace vary, according to circumstances, between 28 and 56 days' imprisonment, viz:—desertion within less than six months' service, leaving his post on sentry duty, or misconduct on such post, threatening his superior, slight acts of disobedience, refusal to obey an escort, leaving barracks

without permission while undergoing punishment, careless execution of orders, absence without leave, drunkenness, neglect leading to the escape of a prisoner, escape from arrest, loss of articles of equipment, incorrect statements in written reports, and false answer on attestation. For a second case in the above offences the punishment is to vary between 3 and 6 months' imprisonment, viz: -assaulting a superiordisobedience, desertion, fraudulent enlistment (e. g. if a man con ceals, that he has already been in the army), false witness, false accusation, theft, deceit in money matters, and other grave misconduct. For all such crimes, if committed for a second time, or under aggravating circumstances, as well as for repeated, albeit less serious misdeeds, or for re-enlistment after having been expelled from the army with disgrace, the punishment is to be imprisonment of from 6 months to a year. Imprisonment for more than a year is usually only inflicted for premeditated assault upon superiors, shameful misconduct such as robbing a comrade, grave fraud, malingering, or causing illness, unnatural or other immorality &c., and also for other serious misdeeds repeated three or four times. Usually the accused is, after repeated misconduct, also expelled from the army with disgrace.

Non-commissioned officers and privates can be sentenced by any military tribunal; warrant officers only by a District Court Martial, and officers only by a General Court Martial.

### c. Military Courts.

In times of peace there exist three kinds of Military Courts, viz:—Regimental Court Martial, District Court Martial, and General Court Martial.

A Regimental Court Martial is convoked by the commander of the battalion &c., and the president, who must at least be a captain, is appointed by him. The other members are two officers, who must have served as such at least a year. Such kinds of courts deal with slight charges, for which the punishment does not exceed the disciplinary power of the commander. They may sentence the culprit to imprisonment of not more than 42 days or inflict lighter punishments, but they cannot decree the expulsion of a soldier from the army. Their sentences require to be confirmed by the commander of the battalion &c.

A District Court Martial is intended to adjudge more serious charges, and is convoked by the commander of the brigade or of the military district. The president must, if possible, be a Field-officer; the mem-

bers, four or at least two, are to be officers from different corps, and must have served at least two years as such. Such a Court Martial is authorised to sentence the culprit to imprisonment with or without hard labour for a period not exceeding two years, or may inflict lighter punishments, and may also decree expulsion. The sentences require being confirmed by the commander of the district or brigade.

A General Court Martial can only be called by the Sovereign or by an Officer of high rank specially appointed thereto. The president must be a General or a Colonel, and the members must as far as possible belong to different corps. The minimum number of members of such a Court in the United Kingdom, in India, in Malta and Gibraltar is eight, and elsewhere 4 Officers, who must all have served as such at least three years. In the first case five of the members of a General Court Martial inclusive of the president must be at least of the rank of captain, and if the accused is an officer every member must be at least his equal in rank. A General Court Martial can inflict any legal punishment and its sentence requires the confirmation of the Sovereign or of an officer specially appointed for that purpose.

In the field every commander of a detachment (its strength is not fixed by military law) may call a Field General Court Martial. It consists of the president and of at least two officers. The commander may preside personally, but, as a rule, he will appoint another officer, if possible, a captain to act as president. If such a court consists of three officers it is authorised to inflict any penalty, but death sentence can be pronounced only if the court is unanimous. If only two officers act as assessors the Field General Court Martial can only inflict field imprisonments No. 1 and No. 2.

In times of peace the procedure is generally as follows:-

The members meet at the appointed time and take their seats at a table; at its head sits the president, and the members on both sides in the order of their seniority. The proceedings are conducted in public. When the order for calling the court and the appointment of the president has been read out, and all has been duly verified and found correct, the accused and all the witnesses both for the prosecution and for the defence are called; the prosecutor appears at the same time; usually it is the adjutant of the corps to which the accused belongs, who is charged with conducting the case for the prosecution; at a General Court Martial an officer or civilian jurist

is present as Judge-Advocate, who watches over the legality of the procedure. The accused may appoint a counsel for defence, who may be either an officer or a civilian. He is first asked if he makes objection to the presence of any member of the court. If he does, and if his objection is considered well founded the member or members objected to retire, and others take their place till a court is constituted to the satisfaction of the accused. The president and the members declare on their oath that they will judge impartially; next the act of accusation is read out, and the witnesses leave the court. Now the accused is asked, if he pleads guilty or not guilty. In the former case, the charge made by the commander of the detachment is read out, and the court pronounces sentence. In the latter case the prosecutor calls up his witnesses one by one to give evidence, and the accused has the right to cross-examine every witness. When the case of the prosecution is completed, the accused may call up his witnesses to clear himself. This defence may be replied to by the prosecutor. The court now rises, and its members pronounce on the case, one by one, in private, the junior member speaking first, and then in order of seniority till the senior member has spoken. If the accused is declared innocent, he is to be set free at once; in the contrary case the prosecutor makes report on oath on the time of service, conduct, campaigns, marks of distinction, former punishments, &c. of the accused. Now the court rises once more, and sentence, like the award, is pronounced with closed doors. Every member gives his award separately and the majority decides. If the votes are evenly divided, the president has the casting vote. The votes of the individual members are never divulged, and the final sentence also is kept secret till it is confirmed by the authorised officer. When this confirmation arrives the sentence is read in presence of the whole corps, to which the culprit belongs, and he is then taken away to undergo his punishment.

### d. Military Penal Institutions.

Soldiers condemned to penal servitude are sent to a prison for civilians in the United Kingdom, even if the offence has been committed abroad. Those who for theft, dishonourable conduct, or for crimes against the common law of the country have been condemned to expulsion from the army, are also sent to a civil prison. Soldiers punished for other delinquencies are committed to a military prison. In every garrison there is a Provost Prison, which is under exclusively

military management, and receives all culprits condemned to imprisonment of not more than 42 days. The prisoners wear prison clothes. Prisoners condemned to more than 42 days' imprisonment are sent to one of the special military prisons existing at Aldershot, Brixton near London, Cork, Dublin, Gosport, Kendal, Stirling and at 10 other places in the colonies. These are governed by pensioned officers, or warrant officers, and their *personnel* consists exclusively of pensioned military men.

### IV. Military Education and Training.

Excepting the institutions mentioned in the text all the schools &c. are placed under the Assistant Military Secretary for Education (See Section I Ch. VI).

### a. Schools for soldiers' children.

There are two of these schools, viz:—the "Duke of York's Royal Military School at Chelsea, London with 550 pupils, and the "Royal Hibernian Military School" at Dublin with 410 pupils. In the latter the sons of non-commissioned officers and soldiers, mainly orphans, are educated by the state free of charge. Clothing (red infantry uniform) accommodation and maintenance are also supplied by the state free of charge. The boys are elected by the Governors of the school when in their ninth year. When they have attained the age of 14, they are mostly enrolled in the army as drummer boys, trumpeters, bandsmen, or as apprentices to some handicraft. They supply the material for an excellent class of non-commissioned officers, but they are not compelled to enter the army. Their admission is conceded to them at their own request, or at that of their parents or guardians. No boy is allowed to remain in the school after the completion of his 14th year. These schools have an organisation which is mainly military; they are governed by a Commander (a colonel or a lieutenant colonel), a quartermaster and adjutant, a surgeon, a chaplain, and a number of warrant officers, non-commissioned officers, army schoolmasters &c. The pupils are divided into companies, and the elder boys are made corporals.

### b. Army Schools.

There are "Army Schools" in every garrison (and several in larger garrisons); these are intended to serve as continuation schools for

non-commissioned officers and men, and as schools for their children. The instruction is given by the army schoolmasters. In the girls' schools the education is imparted by army schoolmistresses. army schoolmasters are recruited from non-commissioned officers and civilians, who have passed a competitive examination. They form a special corps; at first they hold the rank of a sergeant, after eight years' service that of a warrant officer, and they may be promoted to the office of Inspector of Army Schools. As assistant masters even non-commissioned officers may be appointed. The subjects of instruction are:-Reading, Writing, English Grammar (in India also the grammar of the local vernacular), Arithmetic and Mathematics, British history, Book-keeping, Drawing, Military secretarial work, Correspondence, &c.; children and enlisted boys are also taught singing, sewing &c., and receive religious instruction. All soldiers' children between the ages of 4 and 14 are bound to attend these schools, and thus comply with the school legislation of the country. These schools are only morning schools. Attendance in these schools is obligatory on all the enlisted boys up to the age of 18, and on all the non-commissioned officers till they have earned a 2d class certificate. There are three classes of certificates according to the degree of attainments. Promotion to the rank of corporal requires a 3d class certificate, and to the rank of sergeant a 2d class certificate; the cases of promotion requiring a 1st class certificate have been enumerated in Chapter I. Non-commissioned officers and men are taught in the afternoon or evening, and they must not be ordered on any duty, which interferes with their school-attendance. The instruction for children and soldiers is free.

There are 23 former army schoolmasters, who have been promoted to the rank of army school inspectors, and who periodically visit the schools.

### c. Schools for the Education of Officers.

There are two institutions for cadets, viz:—The "Royal Military College" at Sandhurst and the "Royal Military Academy" at Woolwich.

The "Royal Military College" educates cadets for officers of infantry and cavalry. Entrance to the "College" is gained by competitive examination of young men between 17 and 19 years of age, whom the Commander-in-Chief has pronounced worthy to become officers. A few isolated categories of young men, as for example, orphans of officers, may claim nomination by passing a qualifying

examination. The entrance examination takes place every half year and comprizes the following obligatory subjects: - Mathematics, Latin, French or German, English composition and Geometrical drawing; Higher Mathematics, advanced German or French, Greek, History of England, Chemistry, Physics, Geology, Geography, and Drawing are optional. The young men, who have passed successfully are admitted to the college as cadets. The fees vary as follows: -For sons of officers in active service from the rank of Major downwards £40 a year; of a Lieutenant-Colonel or Colonel £60 a year, of a Major-General or Lieutenant-General £70 a year, and for the son of a man, who has not served in either the army or the navy £150 a year. To defray the cost of his uniform every cadet deposits £35 on admission. Some categories (such as officers' orphans &c.) are educated free of charge. The college has a purely military organisation. The Governor is a Lieutenant-General and the teaching staff consists of:— I Commandant, a Lieutenant-Colonel, I Quartermaster, I Riding Master, 2 Surgeons, 1 Chaplain, 3 military professors (officers), and 20 military teachers (Majors and Captains) and 4 civil instructors. The latter officers are also company officers. There are kept for the use of the riding school 56 saddle horses, which are looked after by cavalry soldiers detailed for that purpose. The lower staff numbers 44 non-commissioned officers, who are employed as instructors &c. There are 360 cadets, who receive 3/- a day. The course lasts 1½ years, divided into three terms, and comprises the following subjects:-Army administration, military law and jurisdiction, tactics, military history and geography, fortification, surveying, infantry drill, riding and gymnastics. An examination is held at the end of every term, and to pass the student must earn  $50^{\circ}/_{0}$  of the marks. A cadet, who fails in two successive examinations, or is inefficient in drill, riding, and gymnastics, or if his progress in military science or his conduct is unsatisfactory, is liable to be expelled. In proportion to their success in all the three examinations the cadets are nominated for appointments as officers of infantry or cavalry with the rank of Second Lieutenant. The uniform of the cadets is that of officers of infantry of the line, without gold embroidery or badges of rank and with darkblue facings.

The "Royal Military Academy" prepares cadets for the post of officers in the artillery and engineers. Terms of admission, the subjects of examination, and annual fees are identical with those of the "Royal Military College", but the candidates must be between 16

and 18 years of age. The organisation of the "Academy" is also exclusively military. Its head is the Governor (a Lieutenant-General) supported by a Commandant (a Lieutenant-Colonel), 3 Lieutenants of artillery acting as company officers, I Adjutant, and I surgeon, and there are besides 4 military professors, 13 military instructors, and II civilian teachers for Mathematics, French, German, Drawing, and Chemistry. Riding is taught by the personnel of the artillery riding establishment. The lower staff consists of 29 non-commissioned officers. There are 172 cadets, who receive the same pay as those of the "Royal Military College". The course lasts two years divided into 4 terms. The subjects of instruction are: - Mathematics and Mechanics, Field- and permanent Fortifications, Topography and Surveying, French, German, Tactics, Artillery, Electricity, Chemistry, Drawing in all its branches, the drill for the field- and garrison artillery, riding, and ownnastics. Examinations are held every half-year, and it is expected that, as a rule, the examinee should earn at least half marks in every subject. The regulations for removal of a cadet from the "Academy" are the same as those for the "College". Prizes are awarded for pre-eminent success in every branch, and on the total number of marks at the half-yearly examinations depends the cadets' rank of priority, which enables him to select the arm in which he wishes to serve (artillery or engineers). They are then nominated for the rank of officer, and appointed as Second Lieutenants. uniform of the cadets is that of officers of the garrison artillery, without gold embroidery or badges of rank and somewhat narrower stripes on the trousers.

### d. The Staff College.

The Staff College at Camberley near Aldershot educates officers for the General Staff of the army. At its head is the Commandant (a Colonel acting as Brigadier), and the staff consists of four Professors (Lieutenant-Colonels) of military history and tactics, fortification and artillery, topography and General Staff duties, an instructor of topography (a Major) and three civilian professors for French, German and military jurisdiction. In the building there are living rooms for all the unmarried officers, a mess room, lecture-rooms, a library, &c.

The officers, who apply for admission must be under 35 years of age, must have served five years, and must have passed the examination qualifying for promotion to the rank of captain. They must

ride well and produce a certificate from their commanding officer testifying to their fitness as regimental officers and to their probable usefulness as officers of the General Staff, and also a certificate of health from a medical commission. The entrance examination is held yearly in the beginning of August in London (for officers residing in the United Kingdom) or in foreign garrisons. It comprises as compulsory subjects Mathematics, field fortification, topography, tactics, military law, army administration, and one foreign language (French, German, Russian, or Hindustani); geography, military history, higher mathematics and two more of the above languages are optional. In every subject half marks must be attained, if the result is to be added to the sum total of the examination, according to which the competing officers are classified. The three highest artillery officers are admitted two for the engineers (and alternately every year one more officer for one of these arms), 14 for the infantry, cavalry, and army service-corps, three for the Indian army and one for the marines, making a total of 24 officers admitted yearly into the Staff College. To these are yet to be added eight officers selected by the Commander-in-Chief who must earn at least 3 of the number of marks. Accordingly 32 officers are admitted every year.

The course begins every year on the 15th of January and lasts two years. In their first year the officers are sent to Aldershot from the 15th of April to the 1st of June, and in their second year from the 1st of August to the 15th of September to do duty with another arm than their own. In the first year they have six weeks leave of absence in autumn, and in the second year four weeks in spring to travel abroad, visit battlefields &c., and for this purpose travelling stipends are allowed them. The course of instruction comprises:-(I) Military history and geography, tactical exercises and Staff tours (made by the students); (2) Fortification and artillery with visits to the artillery practising school, and school of engineering; (3) Practical field-fortification and defence of places combined with tactical problems; (4) Duties of the General Staff; (5) Topography, mapping and (optionally) trigonometrical survey; (6) Reconnaissances single and combined; (7) Military Law; (8) German or French; (9) Geology, the chemistry of food, water supply (all these are optional); (10) Riding (for dismounted officers).

At the end of the first year examinations are held in the different branches, and officers who earn less than  $60^{\circ}/_{0}$  of the marks are liable to be sent back to their own corps. In the second year only practi-

cal examinations are held in the country and the officers have to solve problems in writing. On the basis of the results of these examinations and of the opinions he has formed, the Commandant reports, after the conclusion of the course, as to the fitness of the different officers for service with the General Staff or in other branches of the service.

### e. Schools for special purposes.

The Artillery School of Gunnery, which is under the direct management of the Adjutant-General is divided into the principal school comprising the experimental department at Shoeburyness in Essex, and the branch establishments at Woolwich, Golden Hill in the Isle of Wight, Plymouth, Sheerness, and Aldershot. The Commandant of the school, a colonel, superintends all the branches of the institution; the staff of the principal school consists of two Senior Instructors, who are colonels, six Instructors, who are majors or captains, an officer of the General Staff, an adjutant, a quartermaster, 30 warrant officers and non-commissioned officers as Assistant-Instructors, and 37 corporals and gunners. The experimental department employs 3 officers and 68 men. The branch establishments have staffs of from I to 4 officers, and I to IO non-commissioned officers &c. The courses of instruction in artillery (see Section II Ch. III) for officers and non-commissioned artillery officers are held in the principal school, and from it are drawn every summer special staffs for the field-artillery practising school at Okehampton in Devonshire, and for the school of siege-artillery near Lydd in Kent. At Shoeburyness there are available very extensive ranges on the sandy plains at the mouth of the Thames, and accordingly it is here that all the heavy guns are tried, and all the experiments ordered by the Ordnance Committee are made. The branch-school at Woolwich serves mainly for the education of officers and non-commissioned officers of the militia- and volunteer-artillery. The other three branch-schools train men for the numerous and very varied duties of the coast- and garrison-artillery.

The School of Engineering at Chatham in Kent, which is also under the Adjutant-General is managed by a Commandant, a Major-General, and a Staff consisting of an Assistant-Commandant, a Lieutenant-Colonel, 6 Instructors (Field-Officers), who teach the construction of permanent and field fortifications, surveying, electricity, tactics, and aërial navigation, 13 Assistant Instructors (captains or lieutenants), an officer of the General Staff, an Adjutant, a Quartermaster, 31 warrant officers and staff-sergeants acting as junior instructors, &c. The school of aërial navigation has been transferred to Aldershot. In the Engineering school a two years' further training is given to the newly-appointed Second Lieutenants of the engineers, treating of the special branches of this corps, and senior officers also are required to go through a recapitulation course. In addition the *personnel* of the school instructs engineering-recruits in field engineering, &c., and courses are also held in field engineering- and railway-service for officers, non-commissioned officers and men of the cavalry and infantry, and of the battalions of the militia- and volunteer-engineers (see Section II, Ch. III).

As collateral establishments to the above school there exist under the management of a Commandant three Submarine Mining Schools at Chatham, Plymouth, and Portsmouth, each having a staff of two to three officers and two to nine non-commissioned officers. In these schools officers, non-commissioned officers and men of the submarine mining troops of the regulars, militia and volunteers are taught submarine mining, and the use of torpedoes.

The Artillery College at Woolwich has as Director a Colonel of artillery, three Staff-Officers, three Captains acting as Instructors, and several civilian-professors who give lectures on mechanics, metallurgy, armour-plates, steam-engines, and electricity. Three officers, nine warrant officers and non-commissioned officers, and a number of civilian foremen of artificers act as Instructors and sub-instructors in the courses held in the technical institutes of artillery. This establishment principally trains artillery officers intended to be employed in the ordnance department, the technical institutions of artillery, the experimental department, the school of gunnery, and as instructors in the school of gunnery; there are also held in this school courses for officers and non-commissioned officers of artillery in the construction and treatment of the matériel, and for artificers of different arms, of whom about 250 are in constant attendance at these lectures, and who, under the superintendence of the personnel of the school, are employed in the technical institutions of artillery at Woolwich.

The musketry-school at Hythe in Kent trains officers and non-commissioned officers of infantry and cavalry in musketry. The Commandant at its head is a Colonel, supported by an Officer of the General Staff, five officers acting as instructors, a quartermaster, 31 non-commissioned officers acting as sub-instructors, &c., and 18 privates. In that school are held a number of yearly courses for officers and sergeants of cavalry and infantry (see Section II, Ch. III), and two

courses of instruction for Field-Officers. The officers of militia, yeomanry and volunteers, and the non-commissioned officers of the permanent cadres of these services are also required to attend these courses. All the non-commissioned officers, who are appointed as musketry-instructor sergeants must have successfully passed through these schools. These courses also include, in accordance with the regulations, instruction in the use and management of machine-guns.

The Central School of Gymnastics at Aldershot stands under the personal superintendence of a colonel, the Inspector of Gymnasia; it trains officers and non-commissioned officers as teachers of gymnastics for the whole army. The officers' courses last one year, those for non-commissioned officers six months. The non-commissioned officers must be re-engaged men (p. 24), bodily strong and agile, and 20 to 28 years old. The number of men to be trained is to be so regulated that there should be three non-commissioned officers employed as instructors of gymnastics in every battalion or regiment of cavalry, and one such instructor in every battery or company of artillery. There is a Gymnasium in every garrison, where all the recruits are taught gymnastics, and which is open during free time for the very popular physical exercises of officers and men. Each such establishment is always provided with a number of staffsergeants acting as teachers of gymnastics and fencing-masters. In every military district an officer acts as Superintendent of gymnasia, and he is also instructor of gymnastics at the garrison gymnasium of the head-quarters of the district. Besides gymnastics boxing is practised, and also fencing, bayonet-exercise, and cycling. All the gymnasia are under the direct control of the Adjutant-General.

The Field signalling school at Aldershot, which is also under the charge of the Adjutant-General has a staff of two officers, one of whom is a Lieutenant-Colonel and Inspector of signalling of the whole army, and some non-commissioned officers, who act as instructors &c. To this school are sent officers and non-commissioned officers (see Section II Ch. III), who have already had some training at their own corps. There are held two yearly courses for 30 officers each, and three courses each for 30 non-commissioned officers; after the termination of the course the signallist must be able to read at least ten words signalled by flags, or six by lamps per minute. From these trained officers and non-commissioned officers are selected the instructors and assistant-instructors of the troops. Once a year the inspector of signalling inspects the signallers of all the troops in the United King-

dom, and sends in his reports to the Adjutant-General, and then prizes are awarded to those corps which have passed highest in the examination.

The School of Medicine at Netley near Southampton, where also the Royal Victoria Hospital is situated (see Ch. IX), is in charge of a Committee consisting of eminent military surgeons, and has a staff of four professors, four assistant-professors, and a secretary who are all medical men, some military and some civilians. The newly appointed lieutenants who have passed their scientific entrance examination receive in this school further training qualifying them for the duties of a military surgeon. The whole institution is in charge of the Director General of the medical department.

The Army Veterinary School at Aldershot is in charge of a Committee, consisting of eminent cavalry- and artillery officers, and the president of which is the General in command of the Aldershot military district. The teaching staff consists of a professor and an assistant-professor, both being military veterinary surgeons; they give courses of lectures to the newly appointed veterinary surgeons, to farriers, and shoeing-smiths. For the number of officers and farriers sent to this school see Section II Ch. III.

The Royal Military School of Music at Kneller Hall at Hounslow trains non-commissioned officers for the post of band masters, and privates and boys as bandsmen. The former study two to three years, the latter one to one and a half years. The Commandant of the school is a colonel; he is assisted by an adjutant and a bandmaster, who is quartermaster. The instruction is imparted by civilians.

Every year there are arranged courses of instruction for the Officers of Militia, Yeomanry, and Volunteers, in the three schools of instructions at London, Aldershot, and at the camp at the Curragh, each of which is under a Commandant (a Field-Officer) and an Adjutant. The subjects of instruction are:—Drill, knowledge of the regulations, tactics, and the theory of firing. The courses last four weeks, and each is visited by ten officers.

The School of Cookery at Aldershot is in charge of an officer of the General Staff of that military district; it trains non-commissioned officers as Sergeant-Cooks and is a model-school for similar institutions of the whole army. A warrant officer and three non-commissioned officers do duty as instructors.

# V. Pay, Allowances, and Pensions.

## a. Regular Army.

#### I. PAY.

The pay of the army is regulated by Royal Warrant.

#### ra. Officers.

The officers' Pay is issued every month; not directly to the officers but to the regimental agents or bankers, who are appointed by the Secretary of State for War. These agents hand in to the War Office on the 21st of every month an estimate of the sums required for the coming month, and render account once every three months. The salary of the regimental officers is paid in advance, that of the officers in the General Staff, or of officers employed in special posts at the end of the month.

The pay of general and regimental officers depends on their Rank, that of officiers in the General Staff and on special posts on the Post.

The Principal Rates are:-

"Headquarter staff" (War Office) inclusive of all allowances such as for forage-, residence-, servants' allowance:—

그렇게 물어 하고 말았다. 이렇게 못하지만 한 번째 하는 것은	Yearly Pay
Commander-in-Chief of the Army	. £4500
Adjutant-General	
Quartermaster General, Inspectors General of Ordnance and Fo	
tifications, each	. £2100
Military Secretary, Inspector General of the Auxiliary forces, Dire	c-
tor of the intelligence Department and Deputy-Adjuta	nt
General, each	. £1500
Assistant Adjutant-General or Assistant Quartermaster General, ea	ch <i>£</i> 800
Deputy-Assistant-Adjutant General or Deputy-Assistant-Quarte	er-
master-General, each	. £650
Staff-Captain	
Generals and General Staff exclusive of allowances:—	
경우 등 기업에 가는 것이 되었다. 그런 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 다른 사람들은 다른 사람들은 사람들은 사람들은 기업을 받는다. 그런 사람들은 기업을 받는다. 기업을 가는 사람들은 사람들은 기업을 가는 것이 되었다. 그런 사람들은 기업을 가는 것이 되었다. 그런 것이 되었다.	Daily Pay
Commander-in-Chief in Ireland	<b>£</b> 10 15 0
General	
Lieutenant-General	
Major-General	
Colonel in command of a brigade	

Colonel (e. g. Commander of artillery or engineers of a mili-

tary district or Commander of a regimental district) . . . £2 0 0

		Daily	Pay	
Deputy-Adjutant-General		 . £1	10 0	,
Assistant-Adjutant-General		. £1	5 0	
Deputy-Assistant-Adjutant-General or Br	igade-Major	 . £1	1 0	
Staff-Captain or Aide-de-Camp of a Gen		. £—	15 0	

Most of the officers have an official residence.

In the General Staff and at special posts the maximum leave of absence with full pay is 61 days in the year.

The rates per day for regimental officers are as follows (see table p. 225):—

A colonel in command of a regiment of foot guards or of a District of a regiment of the Line draws over and above the pay and the Additional Pay in the above scale a "Command" allowance of 5/- a day, and a lieutenant-colonel acting as commander of a battalion, regiment of cavalry, Brigade division of regular militia- or volunteer-artillery draws 3/- a day as Command allowance.

Officers may be put on Half-Pay either at their own request, or on quitting a special post till they are again put on the establishment. In case of impaired health they can at most be borne for 5 years on the Half-Pay List, and in other cases only to the age limit of their rank. The Half-Pay Rates are:—

For a Field Marshal £1300 a year, for a General £800 a year, for a Major-General £500 a year; for a Colonel or Lieutenant-Colonel, according to the arm 11/- to 12/6 a day, a Major 9/6 to 10/- a day, Captain 7/- to 7/6 a day, Lieutenant 3/- to 4/8 a day, and a Second Lieutenant 3/- to 3/2 a day.

The daily rates of the pay of Chaplains are:—For 1st class £1 (after 5 years £1.2.6.); 2d class 17/6, 3d class 15/-, 4th class 10/-. Surgeons draw:—the Director General of the Medical Department £1500 a year; a Surgeon Major-General £2.15.0 a day; a Colonel of the Medical Corps £2.0.0; a senior Lieutenant-Colonel £1.10.0 to £1.13.0; a junior Lieutenant-Colonel £1.5.0 to £1.7.6; a Major £1 to £1.2.6 plus allowances; a Captain or Lieutenant £200 to £250 a year and no allowances, but after 10 years' service 15/- a day with allowances. The rates for officers employed in the ordnance department are:—For 1st class £1.15.0, 2d class £1.10.0, 3d class £1.6.0, 4th class £1.2.6 (with allowances to all of them). The officers engaged in inspections draw £350 to £750 a year, inclusive of all allowances. Chief paymasters draw £1.10.0 to £1.12.6 Staff paymasters £1.2.6 to £1.5.0 and Paymasters 15/- to £1 a day.

	Remarks		The Affinament	the garrison artillery.	of engineers, of foot-	guards, and of the	is admissible only	for such officers, as	are actually doing	regimental unty	corps.	The Armament	Fay of Second Lieutenants of the gar-	rison artillery and of engineers is only ad-	missible after having	tion.			
Army Service-Corps	Corps Pay	s. d.	0 9	4	ک 4			1	4 0	3 6	3 6	2		ı	I	l		ı	
Army Service-C	-rO dinary Pay	s. d.	0 81	13.7	16 0			1	2 11	9 9	9 /	5 3	2 6	3 6	96	0 11		4.	
y of	Infantr il ədi	s. d.	0 81	13 7	0 91			0 I	111 7	9 9	7 6	5 3	5 0	55	0 6		120		
guards	Guards Pay	98	200	170	170			1	140	70	70	20			ı	1	1	١	1
Foot	-igsA Istasm Tay	s. d.	0 81	13 7	16 o			1 0	11 7	99	9 4	5 3	2 6	3 6	0 6	9 01	7		15 0
neers	En- gineers' Pay	s. d.	14 0	0 6	1			1	0 9	4 0	0	4 0	1	1	0	0	÷.		0 7
Engineers	Or- dinary Pay	s. d.	0 81	0 91	1			1	7 11	01 9	7 10	5 7	2 6	9	9 6	11 0		14 0	15 o
nson Jest	Extra for Gari Artille	s. d.	5 0	3 6				1	3 0	2 0	2 0	2 0	1	1	-1	1	ı	1	ı
June.	Field, Garand Rand Mo Frtille	s. d.	0 81	0 91	1			- 1	11 7	01 9	7 10	5 7	9 2	3 6	9 6	11 0			15 0
	eroH ellitrA	£ s.d.	1 49	9 81 0				- 1	0 15 0	0 8 10	0 9 10	0 78	0 2 6	0 36	0 10 6	0 12 0	13	.5	o 16 6
Jo .	Cavalry il eth	£ s.d.	9 1 1	0 15 0	0 17 0			-	13	0 7 8	1	890	0 5 0	0 5 0	9 01 0	0 12 0	13	15	9 91 0
	Household Cavalry		3 6	9	0 18 0			-	13 6	0	1	890	9 7 0	3 6	0 10 6	0 12 0	ဖ	0	9 91 0
	Rank	**	Lieutenant-Colonel . 1	•	Major after 2 years' service as such	Major appointed 2d	Bat. or cavalry	ddition	•		Lieut, after 7 years' service as such .	٠.	Adjutant in addition to pay as captain	Adjutant in addition to pay as Lieut.	Quartermaster or Riding Master	ditto after 5 years .	01 " "	" " " " " " " " " " " " " " " " " " "	" 20 " "

The pay of the Director General of the Army Veterinary Department amounts to £850 a year, that of Veterinary Lieutenant-Colonel to from £1.5.0 to £1.10.0, of a Veterinary Major or Captain to from 15/6 to £1.4.0 a day, and that of Veterinary Lieutenant to £250 a year. These non-combatant officers also draw Command-allowances and Half Pay.

## 1 b. Warrant Officers.

The pay of Warrant Officers varies between 5/- and 7/- a day, and theirs are weekly payments. For example an Armourer sergeant draws 7/- a day, a Sergeant major of horse artillery draws 6/- a day, of the household troops and of mounted artillery 5/10, of cavalry of the line 5/4, a sergeant major of the food-guards 5/2, of the infantry 5/-, a bandmaster of the artillery or engineers 6/-, of the cavalry 5/6, of infantry of the line 5/-, a senior clerk in the office of the General Staff 5/6 a day, and so on. Warrant officers employed in the War-Office receive an allowance of 1/6 a day. All warrant officers are entitled to free quarters and allowances.

rc. Non-commissioned officers and men. The Principal Daily Rates are:—

	Household	troops	Cavalry of	the Line	Horse	Artillery		Mountn. Art.	Garrison	Artillery	Trainopto	eroomSurr	Tootomondo	r ootguarus	Infantry of	the Line	Army	Service-Corps	Medical	Corps	Ordnance	Corps
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Quartermaster Sergt Squadron or battery Sergeant Major or	4	6	4	4	4	4	4	2	4	2	4		4	0		o	4	3	4		4	3
colour sergeant Squadron, battery or company Quarter-		6	4	4	4	4	4	2	4	٥	3	9	3	2	3	0	3	9	4	3	3	9
master Sergt. Major	3	6	3	4	4	4	4	2	4	0	3	9	-	_	_	_	3	9	_	_	-	_ :
Farrier Sergeant	3	4		10	3	9		7	_	_	3	3	_	_	_		-		- 1	_	_	
Sergeant		0	2	8	3	4	3	2	3	2	3	3	2	6	2	4	2	7	2	8	2	7
Corporal	2	8	2	0	2	8	2	6	2	6	2	6	I	9		8	2	o		1		o
Bombardier	١.				2	5	2	3	2	3	_	- 1	-		_		-	_	-		_	_
Lance or 2d Corporal	-				-	_	-		_	_	2	2	T	4	1	3	I	9	1	5	I	9
Farrier	-	6	1	8	2	2	2	0	-	_	-					-		2	-		-	_
mer	1	11	I	4	2	0	1	$2\frac{1}{2}$ $2\frac{1}{2}$	1	2 1 2 1 2 1 2 1	1		I	2	1	I	1	2	1	2	I	2
Gunner or Sapper	-	-		-	1	4	1	$2\frac{1}{2}$	I	$2\frac{I}{2}$	1	17	-	-	-	_	1 -		- 1		-	_
Driver	-		1		1	3	1	$2\frac{1}{2}$	-		1	ΙŢ	-	_	-	-	1	2	-		-	-
Private	I	9	1	2	-	-	-		-	-4.5	-		1	I	1	0	I	2	I	2	1	2
Boy up to 18 years	10				100									er (j. j. l.) Ned 1913			1				1.	
of age	1	8		8	18	8	To	8	F.S.	8		8		8		8	1	8	1	8		8
Bandsman	I	9	1	2	1 -		1 -		I	5	1	$I^{\frac{1}{2}}$	I	1	I	0	1 -	-	1 -	_	١.	

With special arms the men receive special extra pay according to the following rates:—

With the garrison artillery for specialists such as layers, telephonists, position finders, mechanics, &c. 3/ to 1/- a day;

With the engineers, extra (engineers') pay in 7 classes from 4/ to 2/-. The men are classified according to their skill in the different handicrafts and special branches:—

In the army service-corps extra pay in 5 classes from 3/- to 1/2. The men are classified according to their rank and employment:

In the medical corps extra pay in 4 classes from 4/- to 1/-. Classification according to rank and employment:—

In the ordnance corps extra pay in 5 classes from 3/- to 1/2. Classification according to rank and employment:—

For good conduct, which means, that the soldier has never been punished, he receives further extra pay (Good Conduct Pay). The daily rate amounts to 1d.; The recipient wears a badge in the shape of a  $\land$ , pointing upwards, on the lower sleeve of the left arm. The first of these badges is awarded after 2, the second after 6, and the third up to the sixth respectively after 12, 18, 23, and 28 years of service. Every badge brings an extra penny a day. In case of punishment the soldier forfeits this extra pay or a part of it, but can recover it by good conduct. These extra payments and badges are only awarded to men from the corporal downward.

For "long service and good conduct" a soldier, whose conduct has been faultless for 18 years, receives a silver medal and a gift of  $\pounds 5$ . This distinction can be gained by a sergeant also.

In addition to this every enlisted soldier who extends his service to over 3 years receives for the first 12 years of active service, or for those years, during which he has been engaged on active service a gratuity of £1 a year, but this is not paid him till he is discharged and transferred to the Reserve. Soldiers who only serve 3 years receive, on transfer to the reserves, a gratuity of £2.

## 2. Allowances.

In computing the allowances the whole *personnel* of the army is divided in 20 classes according to post and rank. The 1st, 2d, 3rd, and 4th classes comprise the Generals, the 5th to the 11th the Field Officers, and Officers in special posts, the 12th to the 14th Captains and Lieutenants, the 15th Warrant Officers, the 16th to the 18th

Staff-Sergeants, the 19th Sergeants, and the 20th Corporals and Privates.

The number of forage-rations (see Ch. X) is not regulated by the above classification, but by a special schedule given in the said chapter.

For cooking and firing the weekly allowances of coal amount in winter to from 1850 to 900 lbs. for the 1st to the 5th class; 760 to 520 lbs. for the 6th to the 11th class, 250 to 120 lbs. for the 17th to the 20th class, but this latter only to unmarried corporals and privates living in barracks. In summer these quantities are reduced by about one half. In addition there are allowed special rates for the messes of officers and non-commissioned officers in proportion to the number of members. If the men do not reside in barracks, nor in official buildings, they may receive a money allowance instead of fuel. In winter these rates vary from 2/9 a day for the second to  $3\frac{1}{2}d$ . a day for the 19th and 20th classes.

With the exception of the officers employed in the War Office, and a few others, who have a fixed salary every officer is entitled to an official residence, or to a money-allowance in compensation. The number of rooms for the 1st and 2d allowance-class is not fixed; for the 3d to the 6th class there are allowed in official buildings respectively 7, 6, 5, and 4 rooms with 1 or 2 servant's rooms (kitchens); for the 7th to the 11th class from 5 to 2 rooms with 1 or 2 servant's rooms (kitchens); for the 12th to the 14th class 1 or 2 rooms, with half a servant's room; for the 15th class 2 rooms with a kitchen and for the other classes 1 room. 1

Quarters are generally available and provided for all regimental officers, for most of the Generals or Officers of the General Staff, and these are furnished by government with tables, chairs, coalscuttles and fire irons, and cupboards. All the other articles they must provide themselves. If, exceptionally no quarters are available, lodging allowance is made according to the following rates per day:—

1st class 16/6, 2d class 13/9, 3d class 11/-, 4th class 8/6, 5th class 5/6, 6th and 7th classes 4/6, 8th and 9th classes 4/-, 10th and 11th classes 3/-, 12th and 13th classes 2/6, 14th class 2/-, 15th class 1/6, 16th class 1/4, 17th and 18th classes 9d., 19th and 20th classes, if married 6d., single 4d.

<sup>&</sup>lt;sup>1</sup> For the 16th to the 20th class naturally only if the men are married.

<sup>&</sup>lt;sup>2</sup> When travelling, in private quarters, &c.

For the 1st to the 15th special colonial allowances are made in Ceylon, China, Singapore, Mauritius, St. Helena, on the West Coast of Africa, and in South Africa, but these are different for the different colonies.

If travelling officially the daily travelling allowance is:—for the 1st to the 6th class £1.0.0, for the 7th to the 10th class 15/-, and for the 11th to the 14th class 12/6; but if officers travel or march with troops the travelling allowance is for the first day 10/-, and for all successive days 7/6. For luggage there is allowed carriage free:—

for the 1st to the 5th class, 10 cwts. for the 6th to the 1oth class, 8 cwts. for the 11th to the 14th class, 6 cwts.

and besides 2 cwts for the first horse, and I cwt. for every additional horse.

On changing quarters or garrison the allowable weight for luggage to be carried free varies as follows:—

for the 1st class 40 cwts. for the 7th class 20 cwts. for the 11th class 12 cwts. for the 14th class 9 cwts.

with the same allowance for horses as above. On changing quarters the allowances for luggage to be carried free are:—

for the 15th class 3 cwts. for the 15th class 2 cwts. for the 15th to the 15th class 1 cwt.

and in addition 2 cwts. for every woman and 56 lbs. for every child.

Generals are entitled, according to their rank, to three or four servants, other officers to one soldier as servant, and mounted officers to a groom as well, and if they have three or four horses to two grooms. If these cannot be supplied, the officer is entitled to receive:—in the United Kingdom, for every servant I/- per day, and in the colonies to I/6 to hire a civilian servant.

In the field, or in peace time while under canvas officers receive "Field Allowances", e. g.:—

for 1st class £1.12.6, for 3d class 15.0 for 4th class £0.12.0, for 7th class 6.0 for 8th and 10th classes £0. 4.0, for 11th class 3.6 for 12th and 13th classes £0. 3.0, for 14th class 2.6 for 15th class £0. 1.0, per day.

To reduce the officers' mess expenses every company receives £24, every squadron £48, and every battery of field- or garrison-artillery £36 a year.

Officers promoted from the ranks receive for their outfit £150 if belonging to a mounted arm, and £100 if to a dismounted arm.

To support the band of a regiment or a battalion the following yearly sums are provided: For the cavalry or the infantry £80, for the artillery and engineers £100, and for the footguards (regimental band) £390 to £420.

Office expenses are provided annually for every company, squadron, or battery at the rate of £8 for every 80 men on the establishment. These are intended to defray the cost of writing material and other disbursements; for the purchase of various articles, cleaning material, &c. a company receives 18/- to £1.6.0, a battery £2.5.0, and a squadron £2.4.0 to £3.8.0. These sums are drawn by the battalion to cover the expenses of all the companies and offices of the battalion.

## 3. PENSIONS.

During peace-time officers may resign at any time and after a certain number of years of service they are entitled to a pension. If the resignation is voluntary the rates of pensions are as follows:—

For a Second Lieutenant, Lieutenant, Captain, after		
15 years' service	<b>£</b> 120 a	year
For a Major after 3 years' service as such and 15 years'		
service	£120	,,
after 25 years' service	£250	"
For a Lieutenant-Colonel after 3 years' service as such,		
and 15 years' service	£250	,,
ditto after 27 years' service	£300	,,
ditto after 30 years' service	<b>£</b> 365	,,
ditto after resigning the command of a battalion,		
or regiment of cavalry	<b>£</b> 420	,,
ditto, after 5 years' service as Lieutenant-Colonel		
in the artillery, engineers or army service-		
corps		"
For a Major General	<b>£</b> 700	"
deducting £10 for every year under 62 years		
of age. Minimum rate £600 a year		

For a Lieutenant-General
deducting £10 for every year under 67 years of
age—Minimum Rate £750 a year
For a General £1000 "
Minimum Rate as for a Lieutenant General £900
a year.
The limits of age for officers are:—
For Lieutenants and Captains 45 years of age, for Majors 48 years
for Lieutenant-Colonels 55 years, for Colonel 57 years, for Major-
Generals 62 years, and for Lieutenant-Generals and Generals 67 years.
When these limits are reached retirement is compulsory; in such
case, or if they have not been actively employed for 5 years pre-
viously, they are entitled to the following annual pensions:—
Second Lieutenant, Lieutenant, or Captain £200
Major
Lieutenant-Colonel of infantry or cavalry £420
Lieutenant-Colonel of artillery, engineers, or army service-corps £450
Colonel
Generals with the same deductions, if they are retired for
non-employment as above.
For Chaplains, Surgeons, Veterinary Surgeons, &c. special rates
are fixed, but it would lead us too far to enumerate them here.
A Sergeant-Major is retired compulsorily at the age of 45, most
of the other warrant officers not till 50 years of age (and a few till
they are 55 or 60 years old). After 5 years' service as such, warrant
officers are entitled to the following pensions:
after 21 years' service, in all 3/6 per day
,, 25 ,, ,, ,,
,, 30 ,, ,, ,, 4/6 ,, ,,
(A first class staff-sergeant of the army service-
corps)
If a warrant officer has not served 5 years as such,
but still has served 21 years he has only 3/- " "
Non-commissioned officers and men are divided with respect to
their pensions into 5 classes:—
The 1st comprises quartermaster sergeants, &c.,
" 2d various grades of sergeants in special posts,
,, 3rd sergeants, &c.,
,, 4th corporals, bombardiers, &c.,
" 5th privates.

Non-commissioned officers and men are entitled to a pension after 14 years' service, if they are discharged as invalids, or on reduction of the establishment; or after 18 years' service, if they are discharged in the interest of the state, and in any case after 21 years' service. After 21 years' service the daily rates vary for the 1st class from 2/to 2/9; for the 2d class from 1/9 to 2/6, for the 3d class between 1/6 and 2/3, for the 4th class between 1/3 and 1/8, according to the time during which the man has served in his class. For the 5th class the pensions amount:—

after 14 to 18 years' service to from 8d to 10d. a day

,,	18 years' service	to	10 <i>d.</i>	"
77	19 "	to	11 <i>d</i> .	
,,	20 ,, ,,	to	1/-	,,
21	21 ,, ,,	to	I/I	,,

For every years' service before the 18th year of age had been reached a deduction is made of  $\frac{1}{2}d$ . a day.

There are two Hospitats to admit old pensioned non-commissioned officers, who are unable to earn a living owing to the feebleness of old age, or to wounds and injuries incurred in the service of the country; one of these institutions is at Chelsea (London) and the other at Kilmainham (Dublin); the former accommodates 538, and the latter 140 pensioners, who are all maintained free of charge.

# b. Reserve of the Army.

Officers of the Reserve receive no pay during time of peace, except some possible pensions.

The daily pay of a non-commissioned officer or private of the reserve is 4d, and this is paid at the end of every quarter, and in addition they receive every year on the 31st of March 2d. a day for the previous year, but they must produce a certificate that they have attended the prescribed number of drills. The reservist called up to drill receives, while on duty, the same daily pay that he had before his transfer to the reserve.

## c. Militia.

During the time that the militia are called up for drill and instruction officers receive pay at the following rates:—Colonels £1.2.6, Lieutenant-Colonels 17/—, Major 16/—, Captain 11/7, Lieutenant after 3 years' service 6/6, Lieutenant with less than 3 years' service, or Second Lieutenant 5/6 a day. Captains of the regular army may take their discharge, and serve 10 more years with the militia at the

yearly half-pay of their rank. Officers of the militia engineers draw 2/- a day additional pay, and all the Commanders of battalions receive 3/- a day command-allowance. The other allowances of militia officers are the same as those of the regular army.

The pay of the non-commissioned officers and men of the permanent cadres are almost identical with those of the regular army. The daily pay of militia men is as follows:—

붉은 마늘을 하는 어린다 살으로 바다하다고	Artillery	Engineers	Infantry	Medical Corps
기가를 만든 노름이다. 그렇는 뭐 그 얼마나 돈을 다	s. d.	s. d.	s. d.	s. d.
For Sergeants	2 7	2 7	19	19
" who have served as non- commissioned officers in the regular				
army		3 3	3 4	2 8
" Corporals		I 5	13	1 3
" Bombardiers	1 3	-		
" Privates	I 2	I I	10	1 0

In addition, recruits who have attended the full number of drills receive bounty money of £1.10.0; after completing the yearly drill the other militia men receive similar bounty money of £1.0.0, reengaged men £1.10.0, and sergeants, who have served as non-commissioned officers in the regular army £3.0.0; men, who belong to the militia reserve receive a yearly bounty of £1.0.0.

The allowances are, with certain limitations the same as for the regular army.

# d. Yeomanry.

During the time that the Yeomanry are at drill Yeomanry officers draw the following daily pay:—

Lieutenant-Colonel £1.3.0, Major 19/6, Captain 14/7, Lieutenant, or Second Lieutenant 8/- (9/- after 3 years' service). Every yeoman in the yeomanry cavalry of all ranks receives, inclusive of the forage allowance for his horse, 7/- a day, and pay is moreover allowed for the days spent on the march from their home to the drill-place and back. During the time spent in drill in the squadron or in firing practice on the range, as well as in small troops near their home, yeomen are permitted to draw a daily pay of 3/6.

In addition to their salary officers are allowed  $1/5\frac{1}{2}$  a day forage-allowance for each horse (2 to 4).

For clothes and equipment, for rent of offices, rooms, &c. government allows for every yeoman (exclusive of the permanent cadres) £2.0.0 a year. This money is paid to the regimental fund. Carbines, revolvers, swords, sword belts, gauntlets and trumpets are

supplied by government, but the cost of the other articles of clothing and equipment is defrayed out of the regimental fund.

For injury done to horses during drill compensation not exceeding £30 may be allowed.

### e. Volunteers.

Volunteer officers and men receive no pay (excepting the permanent cadres). They serve voluntarily without salary or pay. The only personal dues to which they have any claim are £10.0.0 outfitmoney on appointment, and a further £10 on passing through a school of instruction for subaltern officers, and pay of 5/- a day (10/- for officers of the submarine mining section) during the time when they are ordered to attend a school of instruction, or are attached to the regulars. The officers of the General Staff of the volunteer-brigades, who however are mostly retired officers of the regular army, receive a pay of £100 a year.

The funds of the volunteers, from which all the expenditure for uniforms and equipment of the men, rent and purchase of offices, drill-grounds, rooms, &c. is defrayed, are derived from the following yearly contributions:—

- a) For every officer and volunteer who has made himself an "Efficient Volunteer" by attending the prescribed number of drills and target-practices £1.15.0 (£5 for submarine mining sections and only 10/— for 3rd class marksmen);
- b) For officers and sergeants, who have become "Proficient Volunteers", who possess a certificate of proficiency earned by passing an examination £2.10.0; this does not apply to the submarine mining sections;
- c) For officers, who have passed an examination in tactics, or in artillery duties, or officers and sergeants who have passed an examination in signalling, or in supply duties £1.10.0;
- d) In the engineer battalions for different articles of equipment for instruction in engineering 1/- for every officer and man;
- e) For equipment 1/-, and for the cloak 2/- per sergeant and volunteer. If the establishment is raised £1.3.0 to £1.10.0 is allowable for each man;
- f) Different travelling allowances, e.g. 2d. per mile for each officer and man travelling to the inspection of a battalion, battalion drill, and artillery target practice, and 4/- a year per officer and man for travelling to the firing range of the infantry;

g) Special daily allowances of from 2/- to 4/- for different ranks, during the time spent in camps of instruction or on route-marches.

Government only supplies the arms of volunteers, but every thing else must be defrayed from the funds above enumerated. Ere the amounts for the "Efficient Volunteers" are paid out every such volunteer must be provided with his uniform, a belt (pouch and valise straps for foot-soldiers), a waterbottle, a havresack, cooking utensils, cloak and cartridge pouch for 70 rounds (20 rounds for services other than that of the infantry).

For the hire of horses, and the purchase of harness for a battery of position (armament and artillery appurtenances are also supplied by government), the yearly allowance amounts to from £100 to £136.

There are also available funds for rooms, artillery harness, and special grants for artillery practice, and for offices. Compensation for horses is the same as that for the yeomanry.

# VI. Dietary and Rations.

#### a. Men.

In peace-time the men are allowed by government only rations of bread and meat; viz:—I lb. of bread, and in the United Kingdom 12 oz. of fresh or preserved meat, and in foreign garrisons I lb. of fresh or 12 oz. preserved meat. If troops are under canvas the meat ration is raised to I lb. In foreign garrisons every soldier's wife has also a full ration allowed her, and every child a quarter of a ration.

Every efficient soldier of 19 years of age who has enlisted for a longer period than 3 years (except in the Foot Guards, Army Service-and Medical Staff-Corps when for any period) receives a daily messing allowance of  $3\dot{d}$ . to cover cost of purchase of groceries, &c.

The rations and the messing allowance form the ménage of the troops. The men of a company or of a troop, &c. form a "Mess", and this is set up under the management of the senior non-commissioned officer, and is superintended by the captain. Vegetables, spice, tea, sugar and condiments for the meals, also fish, sausages, eggs, &c. are bought at the canteen and paid weekly; the account books are submitted to the captain. In the infantry the cooking is done for a whole battalion, each company furnishing a cook, who prepares the meals for the company under the superintendence of a sergeant

cook, who is on the establishment and is a non-commissioned officer trained in the army cookery school. During the day three meals are usually served:—for breakfast: tea with bread and butter, with the addition of bacon, fish, &c.; at noon: meat with vegetables and pudding, and in the evening: tea with bread and some other food. Of late great attention has been bestowed on the victualling of the soldiers, and their food is now plentiful and good. In addition to the deductions made from the soldiers' daily pay the messing fund derives some income from the profits of the canteen, and from the sale of the kitchen-refuse. If a soldier is absent on leave, or laid up in the hospital, or employed as servant by an officer not living in barracks, or for other reason does not participate in the mess, he receives 6d. a day in lieu of his rations of bread and meat.

When the soldiers are on the march in the United Kingdom they can be billeted only in inns and public houses, and the innkeepers are bound to give the soldier every day for dinner:—I‡ lb. of meat, I lb. of bread, I lb. of potatoes and vegetables, and a pint of beer; also salt, pepper and vinegar; for breakfast half a lb. of bread, and a cup of tea. For this and for the soldier's lodging the innkeeper is paid I/9 per day for each man.

In war the rations are regulated according to the climate and local circumstances; for war in a country with moderate climate the rations are:—

I lb. of fresh or preserved meat,

1½ lbs. of bread, or 1 lb. of bisquit, or 1 lb. of flour,

of I oz. of tea,

of I oz. of coffee.

2 oz. of sugar,

 $\frac{1}{2}$  oz. of salt,

12 grains of pepper,

½ lb. of fresh or 1 oz. of preserved vegetables.

Upon orders being given by the General in Command rum and lime-juice may be added to the rations; and tobacco is also usually issued on payment.

The emergency ration carried by each man consists of I lb. I oz. of meat biscuit.

For every soldier in barracks there are issued once every three months 24 lbs. of straw to fill the palliases; under canvas, 5 soldiers receive between them 72 lbs. with an addition of 36 lbs. after 8 and 16 days. After 24 days the ration of 72 lbs. is resumed.

The weekly issue of coals in barracks for warming the rooms is in winter 210 lbs. for every 10 men, exclusive of the requirements for the guard-rooms, wash-houses and baths, rooms for non-commissioned officers &c. The weekly issue for the kitchens is the whole year round 3 to 5 lbs. per man, according to the apparatus in use. In camp the weekly issue for the kitchens is 21 lbs. of wood or  $10\frac{1}{2}$  lbs. of coal, with the addition of 1 lb. of kindling wood to every 20 lbs. of coal.

## b. Horses.

In the United Kingdom the contractors deliver the forage straight to the stores or barracks. Every supply must be examined and approved of by a committee of 3 officers, one of whom is a veterinary surgeon; the daily issue from the stores to the troops is superintended by the captain of the company receiving the forage.

In times of peace there is fixed a uniform forage ration for all the horses, viz:—10 lbs. of oats, 12 lbs. of hay, and 8 lbs. of straw. In camp there is issued for every horse 12 lbs. of oats and hay but no straw. For horses in the army service-corps employed in specially heavy work an extra ration of 1 lb. of oats is allowed. Large mules (12 hands or over) receive the same rations as the horses, but the smaller mules only receive:—in garrison, 5 lbs. of oats, 10 lbs. of hay and 13 lbs. of straw, and in camp, 6 lbs. of oats and 12 lbs. of hay.

On marches in the United Kingdom the innkeeper supplies the same rations as the animals receive in garrison, and is indemnified by a payment of 1/9 inclusive of stable accommodation.

In the field the ration of oats and hay is the same as when under canvas in times of peace, but the reserve horses that have been called in, being accustomed to a larger allowance of oats receive a ration of 18 lbs. of oats and 10 lbs. of hay. The emergency ration carried for the draught horses of the army service-corps and the baggage waggons consist of 20 lbs. of patent fodder.

The saving of straw in summer or at manœuvres may be turned to the advantage of the horses by drawing in lieu of 2 lbs. of straw 1 lb. of barley, or 1 lb. 2 oz. of bran, or  $\frac{1}{3}$  lb. of groats, or  $1\frac{1}{2}$  lbs. of hay, or 1 lb. of oats. The same rates apply to times of war, if there is a lack of any particular kind of forage. In peace time also occasionally carrots, linseed, green fodder, &c. may be drawn in lieu of oats and hay of equal value.

# VII. Technical Institutions for Artillery, Rifle- and Ammunition Factories and Army Clothing.

The "Ordnance Factories" are under the management of the Director General of Ordnance, but the financial control of these establishments is under the Financial Secretary (Section I, Ch. VI).

There are six Ordnance Factories in the Kingdom, viz:-

- 1. The Carriage Department,
- 2. the Laboratory,
- 3. the Gun Foundry,
- 4. the Small Arms Factory at Enfield,
- 5. the Small Arms Factory at Birmingham,
- 6. the Powder Factory at Waltham Abbey.

Each of these establishments is managed by a Superintendent, who is a Staff-Officer of the army, or of the navy (because these establishments supply the navy also), and who is assisted by an expert, who is a civilian.

The three first-named establishments are at Woolwich, and form a consolidated institution, known as the "Royal Arsenal", which usually employs 12,000 to 15,000 workmen. The Carriage Department is much the same thing as the German artillery workshops; the Laboratory manufactures also projectiles and ammunition. In the Gun Foundry all sorts of guns for both army and navy are made and repaired.

Both the Small Arm Factories employ between 3000 to 4000 workmen, and they make all the rifles, machine-guns, carbines, revolvers, bayonets, swords, sabres, and lances. Occasionally arms, especially machine-guns, are ordered of private firms as well.

In the Powder Factory at Waltham Abbey in Essex all sorts of powder are manufactured, cordite included. Cartridges and shell are made in the laboratories.

The Army Clothing Department is in London, and its head is an official, who is a civilian. It is subdivided into three sections, viz:—

- 1. The Clothing Depôt, where all the finished clothes are kept in store;
- 2. the Inspection Branch, where all the materials, leather, &c., supplied by private firms are inspected and approved of;
  - 3. the Clothes Factory, where all the articles of clothing and equip-

ment for the regulars and the militia are made. The Army Clothing Department also supplies on payment, cloth for the uniforms of the yeomanry and volunteers, as well as ready made cloaks, head coverings, and accoutrements. The regulars and the militia are supplied directly from the Army Clothing Department with the ready made articles of clothing and equipment, according to the measurements they have sent in. Cloth is delivered for only a small percentage of the clothing, viz:—for men of unusual size. A certain quantity is delivered to the tailors of the battalions to be used in fitting on the different articles of clothing.

# VIII. Barracks and Life in Barracks.

Till comparatively lately British troops were housed very badly in the United Kingdom, and in the colonies in many small garrisons. In the United Kingdom and especially in Ireland, a great number of battalions and regiments of cavalry were located in small detachments and in several garrisons, and many of the barracks had become absolutely dilapidated. The first attempt to concentrate the troops in larger garrisons dates from the time of the Crimean war, when the hut camps at Aldershot, Colchester, Shorncliffe, and on the Curragh (in Ireland) were erected. Gradually men got accustomed to the idea of converting these camps into permanent establishments. Drill grounds were purchased in the neighbourhood, and of late the old wooden structures were replaced by truly excellent barracks. In the garrisons that have been retained the old barracks have been similarly replaced by new ones, and the British soldier is now in the enjoyment of accommodation, which is not inferior to that of any other army.

A quarter of the army in the United Kingdom is housed in the above-named four camps of instruction, viz:—At Aldershot 14 battalions, 4 regiments of cavalry, 9 batteries (to be shortly raised to 12), &c.; at Colchester 3 battalions, 1 regiment of cavalry, 3 batteries, &c., and at the Curragh (county Kildare, Ireland) 3 battalions, 2 regiments of cavalry, and 2 batteries. In summer these numbers are almost doubled by troops, which are called up from other garrisons and placed under canvas. Of all these places Aldershot is naturally the most important, being the proper school of preparation of the army

for war. It will therefore not be out of place to describe it here somewhat more in detail.

The CAMP is in the middle of extensive training grounds, which (with slight interruptions) is divided into two parts. The one, west of the London and Portsmouth road, extends from north to south for about 33 miles, and the other, to the east of the first extends for about 5 miles north to south and 3 miles west to east. The barracks lie east of, and close to the road; they are arranged in three so-called "Lines", which are named after the famous Generals Marlborough and Wellington, and after Stanhope, the former War Minister. Each line accommodates a brigade of infantry; the cavalry brigade is located in the "Wellington Lines", the engineers and the army service-corps in the "Stanhope Lines", and the artillery is distributed between the "Marlborough" and the "Wellington Lines." The barracks, inclusive of the drill grounds, that lie between them altogether cover a space 2½ miles in length, and nearly I mile in width. The little town of Aldershot lies south of the camp, and in its immediate neighbourhood there are 4 stations of the London and South Western, and South Eastern railway lines. Aldershot also includes the ten new or rebuilt barracks at Woking, which is an important junction about 6 miles to the east of the camp. Every Unit of troops has a barrack to itself, which is a brick-building one to two storeys high, and is named after some successful battle; the barracks in the "Wellington Lines" however are of older construction and four storeys high. depôts for the artillery and the army service-corps, a military railway station, provision- and forage stores, a large gymnasium, 5 garrison churches for various religious denominations, 2 garrison hospitals, an officers' club, &c. complete the arrangements of the camp.

In barracks the men live and take their meals in rooms, which are fitted up for 12 to 24 men each; in the more modern barracks mostly for the larger number. The beds are placed side by side, the heads towards the wall, and are fitted to be folded back. During the day mattress and coverlets are rolled and strapped up and placed on the top of the folded up bedstead. Near each bed is a framework for the man's arms and over the head a rail with hooks to hang up his clothes and accoutrements. Wardrobes are not in use, but of late small boxes have been introduced, one for each man, to be placed at the foot of the bed. In the middle of the room there are placed tables and benches. Every day one man is told off as room orderly, whose duty it is to clean and tidy up the room after his comrades

have left, fetch the meals from the kitchen, and take the food to men mounting guard, &c. The unmarried sergeants live in small rooms, near those of the men.

In every barrack the married non-commissioned officers and men have their quarters in special buildings. They have assigned to them one or two rooms according to the size of the family; if there are two children in the family they have a right to two rooms. Marriage is allowed to all the staff-sergeants, to  $50^{\circ}/_{\circ}$  of the other sergeants,  $4^{0}/_{0}$  of the corporals and privates in the cavalry, artillery and engineers, and 30/0 in the infantry. Corporals and men have this concession made them on condition of their having served seven years, and that they have two good conduct badges, and prove that they have £5 in the savings' bank. Married soldiers may receive their rations separately, and uncooked, and if the man is engaged on duty away from his family, he is paid 4d. a day for his wife and  $1\frac{1}{2}d$ . a day for each child. On change of garrison the family and a certain quantity of luggage (see Ch. V) are transported free of charge. The wives of corporals and men do the washing for the unmarried men and receive 4d. a day per man for the mounted and 8d. for the dismounted arms. The use of the washhouses is free. Food can be bought at the canteens at very moderate prices. In the distribution of the nett-profits made in the canteens regard is also had to the families. In some branches and posts, especially with the bands, the percentage of married men is much higher than that mentioned above; it sometimes reaches  $50^{\circ}/_{\circ}$ .

In every barrack there is a canteen, which is divided into two parts, viz:—the Canteen proper and the Recreation Rooms. The canteen proper is again subdivided into two branches, viz:—a grocery, a refreshment room, where only ready cooked food is served, and coffee, tea, and non-intoxicating drinks, and a beer bar. The latter is under special management, whilst the two former may be in charge of a single person. Great attention is paid to the ample equipment of the recreation rooms so as to find the men for their free hours instructive and agreeable occupations within the barracks, and thus to protect them as much as possible from the evil influences of garrison towns. The institution consists of a reading room, a writing room, play- and billiard rooms, a library, a skittle-ground, and in some cases even a theatre, where all sorts of pieces are represented. The men partly subscribe to these institutions, which then form real clubs, and partly they are kept up by yearly contributions of 50/- per half-

squadron, company or battery. Pensioned non-commissioned officers are generally appointed as managers of the beer-bar and of the recreation-rooms, and the men in attendance are told off from the troops as required. The whole canteen is in charge of a committee consisting of a Field-Officer, who is the chairman and two Officers. Of the latter one acts as treasurer, who daily pays the money taken into the bank and receives the necessary contributions.

Every unit of troops has a separate mess for the warrant officers and non-commissioned officers inclusive of the lance sergeants, and membership of this is obligatory on all of them. In addition to the entrance fee amounting to three days' pay the single members contribute 1/6 a month, the married members 9d. The mess is administered by a committee, consisting of a Field-Officer acting a chairman and two sergeants, who render account monthly to a general meeting, and appoint a sergeant to be manager for a month. This non-commissioned officer is set free from all military duties, and acts as superintendent and cashier. The bill of fare consists of the usual rations of the members, who must not be charged more than I shilling a day per man, inclusive of extras. The mess-rooms consist mostly of dining room, reading- room and kitchen, and in some corps they are furnished very well, at times even luxuriously. Presents from non-commissioned officers of other regiments, portraits of officers of their own regiment, trophies won at rifle competitions, arms and hunting trophies brought from war or foreign garrisons adorn the walls and tables, and on the whole the mess-rooms are made as elegant and comfortable as possible. Corporals and privates must not be introduced into the mess-rooms of the non-commissioned officers.

Leave of absence is granted liberally to the British soldier. In the winter months from the 15th of October to the 14th of March as many as  $25^0/_0$  of the men of each corps receive leave of absence with full pay allowed them. But this is only given to trained men of good conduct, whose clothes and accoutrements are in good condition, and who have no regimental debts. Leave of absence generally lasts a month, but a soldier, whose home is very far, may obtain an extension. Railway and steam ship companies generally make special arrangements in favour of soldiers, such as double journey for single fare and the like. The men take with them their clothes, accoutrements and belt, but no arms.

There is more comradeship in the Life of Officers in the British army than perhaps in any other army. Many circumstances con-

tribute to this, primarily the custom of promoting officers in the regiment up to the rank of Lieutenant-Colonel. The young officer joins his regiment with the consciousness that it will be his home for the best years of his life; nay he even cherishes the hope, that some day he may command it. He shares with his regiment joy and sorrow, war and peace, pleasant and unpleasant garrisons, but always in the circle of his comrades, among whom changes are few and far between. The frequent change of garrison also brings it about, that comparatively few officers marry and most spend their lives in the society of their comrades. Finally there are in all barracks officers' rooms, which usually are under the same roof as the officers' mess-rooms. The officers' accommodation is on a very modest scale. Lieutenants and captains usually occupy only one room, field-officers have two rooms, but a commanding officer lives in a separate suite of rooms; in consequence of this the intercourse among the officers is restricted to the mess-rooms, where usually also all meals are taken. Owing to the difficulty of transporting much furniture at a change of garrison, officers usually furnish their private rooms very sparingly, but per contra the mess-rooms all the more elegantly and comfortably. The walls and tables are adorned with trophies, war-relics, portraits of commanders, plate, and the numerous curiosities, which British troops are able to collect in their varied and extensive wanderings in war and in peace. The mess-rooms usually consist of a reading-room, ante-room, and dining- room, and in most barracks there is also a billiard-room and card-room, lavatory, &c. On being first appointed every officer pays an admission fee of 30 days' pay, and at every promotion he makes a further payment of thirty times the difference between the pay of his former and his new rank. The monthly subscription is two thirds of one day's pay. These contributions, together with the government grant (see Ch. V) form the fund, out of which the maintenance of the mess-rooms is defrayed. Every unmarried officer is bound to take his evening-meal at the mess, but about his other meals he may make what arrangement he likes. Three meals a day are usually served:-breakfast between 10 and 11 a.m., lunch between I and 3 p. m., and dinner at about 7.30 to 8 p. m.; this latter meal is always taken in common and in the prescribed messdress. The mess is managed by a committee of officers, of whom one acts as secretary. A sergeant is the permanent non-commissioned officer of the mess, and a number of men are told off as permanent mess waiters. The officers' servants wait at table at the evening-meal. The men permanently told off and the servants wear livery. All accounts must be paid by the members on the 7th of every month, to cover the liabilities of the previous month.

## IX. Medical Service.

As has already been observed in Section I, Ch. II g, the Military Hospitals are divided into "General Hospitals", "Garrison Hospitals", and "Hospitals for soldiers' wives and children." There are only two General Hospitals in the United Kingdom, viz:-the "Herbert Hospital" at Woolwich, and the "Royal Victoria Hospital" at Netley near Southampton. These two institutions receive all the invalided soldiers sent home from India or the colonies, and tend them till they are restored to health, or dismissed as pensioners; they also receive sick men from the garrisons, and sick officers, for whom special quarters are provided. Garrison hospitals only admit the sick of the garrison. Hospitals for soldiers' wives and children only exist in some garrisons, and are partly maintained by private benevolence. They admit none but the wives and children of soldiers who are married on the establishment (boys up to 10 and girls up to 14 years of age). These patients are treated free of charge. The families of soldiers, not married on the establishment, are admitted only under very exceptional circumstances.

Every hospital is under the charge and superintendence of a senior surgeon, who is assisted by the necessary number of surgeons and attendants told off from the medical corps. The Chief-Surgeon is responsible for the administration of the hospital and for the maintennance of discipline among the medical *personnel*; nevertheless the patients are visited daily by the Field-Officer of the day of the garrison and are asked, if they have any complaint to make. Officers may at certain appointed times visit their men in hospital, but must not, without the surgeon's consent, make them any present of food, or drink, or dainties.

Patients, who commit an offence in hospital, are still treated as usual, but they are under arrest, and are punished by their commander after recovery.

In every barrack there is usually set aside a locality, where men who report themselves ill, are examined by a surgeon. Those who are unfit for duty, are then taken to a hospital by a non-commissioned officer, where they are expected to arrive in summer before 9, and in winter before 10 in the morning. The men take with them their undress uniform and their day's ration uncooked. On the day preceding the discharge of a patient from hospital his corps is to be informed of it.

The food and nursing of the patients in hospital conforms to special prescriptions, and is divided into seven categories depending on the gravity of the cases. The surgeon determines each patients' category. Officers and soldiers treated for wounds in battle are entertained free of charge. For usual cases of sickness 7d. a day is deducted from the soldier's pay.

With exception of the Guards, other corps have no longer special surgeons permanently attached to them, but in each case a surgeon is appointed who exercises superintendence over the healthiness of the barracks, quarters of the married soldiers, &c.; he examines the sick, before sending them to the hospital, and trains the ambulancemen. Such surgeons may also be employed in the hospitals, and they accompany the troops to their manœuvres.

# X. Horses and Remounts.

## a. Purchase of Remounts.

Subject to the Quartermaster-General (see Section I Ch., VI) the Remounts are examined by the Inspector General, a Major General, assisted by a Deputy-Assistant-Adjutant-General. Under his orders three colonels of cavalry or artillery accompanied by three veterinary surgeons travel in the horsebreeding districts, and purchase remounts from the breeders or traders without the intervention of middle men. The horses must be three to six years old, be at least 15 hands high, and must immediately on being purchased, be designated as draught or saddle horses. The animals are sent sometimes directly to the regiments, but more usually to the remount-depôts at Woolwich or Dublin. Depôts are attached to the two remount-companies of the Army Service-Corps (see Section I, Ch. II f.); there the remounts are collected and kept under the superintendence of officers of remounts, who are Staff Captains, till the horses are taken in detachments to their several regiments.

In the budget of 1898/99 a sum of £101,100 has been voted for the purchase of 2253 remount horses and mules, distributed as

follows:—99 at £50 for the household troops; 961 costing on an average £39/15 for the cavalry of the line, 891 at the average price of £42 for the artillery, 42 at £42/16 for the engineers, 32 at £40 for the cadres of the transport for the infantry regiments, 39 costing on an average £30 for the mounted infantry, 131 at £42 for the Army Service-Corps, and 58 at varying prices for the Army Service-Corps in the colonies. There were on the establishment 17,910 horses and mules; hence the ratio of the remounts is about 1:8. These numbers refer only to the troops garrisoned in the United Kingdom and in the colonies.

# b. Casting of Old Horses.

After the summer-drills, or manœuvres, or as soon as possible after the 1st of October each corps hands in every year by the usual process to the Inspector General of Remounts a list of all the horses to be cast. This list is to include all the horses that are 15 or more years old, and either are already unfit for service, or would presumably become so in the course of the year. In the United Kingdom these horses are inspected by the Inspector General of Remounts, or by the General commanding the district, and at their command the horses are cast. Horses, that have become unserviceable through accident, may also be cast at any time. These cast horses are sold by public auction in presence of an officer specially appointed for the purpose. In the year 1896/97 there were sold 1204 horses or  $9.29^{0}/_{0}$  of the average establishment at the average age of  $13\frac{4}{12}$  years, and the average price realised was £9.3.0.

#### c. Recruitment of Horses in War.—Horse-Reserves.

According to the "National Defence Act" of 1888 government is empowered at a time of national danger, or when the militia is being mobilised, to requisition all the horses, vehicles, and means of transport of the country.

But to have reserve-horses of the proper stamp, ready for the initial requirements of mobilisation, or of a foreign war, a horse-reserve of 14,550 horses has been formed. The owners of a great number of horses (e.g. railway and omnibus companies, proprietors of livery stables, &c. are invited to register a percentage of their horses of their own free will. The animals so offered are examined and classified by an officer of the remount-department, and the owner then signs a contract, binding himself in case of a government declaration, or of national danger, to supply within 48 hours and

upon the stipulated terms of prepayment the military authorities with a certain number of serviceable sound horses of defined breed and age. If he fails to deliver the number of horses contracted for, he has to pay a fine of £50 for every horse that is deficient. In return he receives 10/- a year for every horse that is on the register, and these animals are inspected yearly by officers of the remount-department.

After the first requirements of the troops are satisfied the formation of horse depôts is taken in hand by purchasing animals in the country or in the colonies, principally in Canada and in Australia, where horse-breeding is carried on to a large extent. But in most wars, which the British army has to wage, the means of transport must be adapted to the character of the country, and this is in many cases not at all suited for the employment of horses. Camels, mules, oxen, and other beasts of draught or burden must be purchased, and in all such cases it is self-evident, that the means of transport cannot be collected, nor can the transport-service be organised till after the outbreak of the war.

### d. Officers' Horses.

Majors, captains, and lieutenants of field artillery as well as captains and lieutenants of the army service-corps are mounted on horses of the establishment, but the major is entitled to draw forage for his own horse in addition. All other mounted officers must find their own horses, and draw rations for them on the following scale:—

	In Peace I	n War
General	8	6
Lieutenant-General	6	4) 55
Major-General	5	5 each in bodies of cavalry.
Colonel acting as Commander of brigade		3 500 5
Officer of the General Staff according to rank .	I—3	3
General's Aide-de-Camp	2	3
Cavalry:—Lieutenant-Colonel	4	3
Major or Captain	• • 3	3
Lieutenant	2	3
Horse-Artillery:—Lieutenant-Colonel	• • 4	3
Major	3	3
Captain or Lieutenant	2	2
Field Artillery:—Lieutenant-Colonel	3	2
Major (see above)	I	I
Engineers:—Field-Officers	2	2
Captains	2	2
Lieutenant	1	2

			In Peace	In War
Infantry:-Lieutenant-Colonel			2	2
Major		• •.	I	, I
Adjutant of battalion			1	I
Army Service-Corps:-Lieutenant-Colone	l		I	2
Major			I	Ĭ
Surgeon holding rank of Field-Officer .			3 <u>-</u> 1	2 — I
Veterinary Surgeon			2	2 — I
Riding Master of cavalry 1			2	ı

Officers generally purchase their horses privately; they may however buy 2 horses from the remount-depôt; for the household cavalry for £63, and for £52 for the other arms; these horses may however not be sold without leave before the expiration of 5 years. After 5 years they become the officer's sole property, but may in return for the remount price be returned to the establishment within that time if they are sound and not more than 7 years old. If they are over 7, and under 10 years old £5 are deducted from the repayment for every year over 7. Officers, who have been promoted from the rank of non-commissioned officers have the right to purchase from the regiment the horses they require at the remount price of the arm, and they also enjoy other privileges with respect to the payments.

## e. Stable-Duty.

In the stable the horses are groomed three times a day, viz:generally in summer between 6 and 7 a.m., and in winter between 6.30 and 7.30 a.m.; at noon for 1½ hours, after return from drill, and finally from 5 to 6 o'clock in the evening. At noon all the officers not employed elsewhere witness the stable-duty, but in the morning and in the evening only the officers on duty for the day. The horses are watered at least four times a day, and fed with oats three times, viz:—3 lbs. each in the morning and at noon, and 4 lbs. at the evening's service. The hay is served out in two equal portions, viz:-after the noon and evening feed with oats. At the morning attendance the bedding-straw is removed from the stables, and shaken out, whilst the other straw is kept in the stables. During the day the horses stand on the bare stone floor, and the straw is not prepared till the evening service, when the old straw mixed with clean straw is again spread under the horses. In this manner it is believed that the air is kept sweet in the stables.

<sup>&</sup>lt;sup>1</sup> Other Riding Masters are mounted on horses of the establishment.

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